

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

Department for Environmental Protection

Division for Air Quality

(Amendment)

401 KAR 51:017. Prevention of significant deterioration of air quality.

RELATES TO: KRS 224.10-100, 40 C.F.R. [CFR] 51 Subpart I, Appendix S, Section IV, Part 51, Appendix W, 51.166, 52.21, Part 58, Appendix B, 60, 61, 63, 81.318, 81 Subpart D, 42 U.S.C. [USC] 7401 to 7671q (Clean Air Act), 4321 to 4370d (National Environmental Policy Act)

STATUTORY AUTHORITY: KRS 224.10-100, 40 C.F.R. [CFR] 51.166, 52.21, 42 U.S.C. [USC] 7401 to 7671q (Clean Air Act)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the ~~[Natural Resources and]~~ Environmental and Public Protection Cabinet to promulgate ~~[prescribe]~~ administrative regulations for the prevention, abatement and control of air pollution. This administrative regulation provides for the prevention of significant deterioration of ambient air quality. The provisions of this administrative regulation are not different nor more stringent than the federal regulation, 40 C.F.R. [CFR] 51.166.

~~**[Section 1. Definitions.]** Terms not defined in this section shall have the meaning given them in 401 KAR 51:001.~~

~~(1)(a) "Actual emissions" means the actual rate of emissions of a pollutant from~~

1 ~~an emissions unit, as determined in accordance with paragraphs (b) to (d) of this~~

subsection.

~~(b) — Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during the two (2) year period which precedes the particular date and is representative of normal source operation. The cabinet may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.~~

~~(c) — The cabinet may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.~~

~~(d) — For an emissions unit (other than an electric utility steam generating unit) which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.~~

~~(e) — For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, if the source owner or operator maintains and submits to the cabinet on an annual basis for a period of five (5) years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten (10) years, may be required by the cabinet if it determines that period to be more representative of normal source postchange operations.~~

1       ~~(2) "Adverse impact on visibility" means visibility impairment which interferes~~  
2 ~~with the management, protection, preservation or enjoyment of the visitor's visual~~  
3 ~~experience of the Class I area. This determination shall be made on a case-by-case~~  
4 ~~basis and shall consider the geographic extent, intensity, duration, frequency and time~~  
5 ~~of visibility impairment, and how these factors correlate with the times of visitor use of~~  
6 ~~the Class I area, and the frequency and timing of natural conditions that reduce~~  
7 ~~visibility.~~

8       ~~(3) "Allowable emissions" means the emissions rate of a stationary source~~  
9 ~~which is calculated using the maximum rated capacity of the source (unless the source~~  
10 ~~is subject to state or federally enforceable limits which restrict the operating rate, or~~  
11 ~~hours of operation, or both) and the most stringent of the following:~~

12       ~~(a) The applicable standards in Title 401, KAR Chapters 57, 59, 60, and 63,~~  
13 ~~or 40 CFR 60, 61, and 63;~~

14       ~~(b) The applicable state or federally approved regulatory emissions limitation,~~  
15 ~~including those with a future compliance date; or~~

16       ~~(c) The emissions rate specified as a state or federally enforceable permit~~  
17 ~~condition, including those with a future compliance date.~~

18       ~~(4)(a) "Baseline area" means an intrastate area (and every part of that area~~  
19 ~~designated as attainment or unclassifiable pursuant to 42 USC 7404(d)(1)(A)(ii) or (iii)~~  
20 ~~(Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act), in which the major source or major~~  
21 ~~modification establishing the minor source baseline date would construct or would have~~  
22 ~~an air quality impact equal to or greater than one (1)  $\mu$ g/m<sup>3</sup> (annual average) of the~~  
23 ~~pollutant for which the minor source baseline date is established. Area redesignations~~

~~under 42 USC 7404(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act), cannot intersect or be smaller than the area of impact of a major stationary source or major modification which:~~

~~1. Establishes a minor source baseline date; or~~

~~2. Is subject to this administrative regulation and would be constructed in the Commonwealth of Kentucky.~~

~~(b) A baseline area established originally for total suspended particulate (TSP) increments shall remain in effect and shall apply in determining the amount of available PM<sub>10</sub> increments, except that this baseline area shall not remain in effect if the cabinet rescinds the corresponding minor source baseline date in accordance with subsection (27)(b) of this section.~~

~~(5) "Baseline concentration" means that ambient concentration level which exists in the baseline area when the applicable minor source baseline date is established. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:~~

~~(a) The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (c) of this subsection; and~~

~~(b) The allowable emissions of major stationary sources which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.~~

~~(c) The following shall not be included in the baseline concentration and shall affect the maximum applicable allowable increase:~~

1       ~~1. Actual emissions at a major source, which result from construction~~  
2 ~~commencing after the major source baseline date; and~~

3       ~~2. Actual emissions increases and decreases at a stationary source~~  
4 ~~occurring after the minor source baseline date.~~

5       ~~(6)(a) "Baseline date" means major source baseline date, defined in subsection~~  
6 ~~(24) of this section, or minor source baseline date, defined in subsection (27) of this~~  
7 ~~section.~~

8       ~~(b) The baseline date is established for each pollutant for which increments~~  
9 ~~or other equivalent measures have been established if:~~

10       ~~1. The area in which the proposed source or modification would construct is~~  
11 ~~designated as attainment or unclassifiable pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii)~~  
12 ~~(Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act) for the pollutant on the date of its~~  
13 ~~complete application; and~~

14       ~~2. For a major stationary source, the pollutant would be emitted in significant~~  
15 ~~amounts, or, for a major modification, there would be a significant net emissions~~  
16 ~~increase of the pollutant.~~

17       ~~(7) "Begin actual construction" means initiation of physical on-site~~  
18 ~~construction activities on an emissions unit which are of a permanent nature. Those~~  
19 ~~activities include, but are not limited to, installation of building supports and~~  
20 ~~foundations, laying underground pipework, and construction of permanent storage~~  
21 ~~structures. For a change in method of operations, this term refers to those on-site~~  
22 ~~activities other than the preparatory activities which mark the initiation of the change.~~

23       ~~(8) "Best available control technology" means an emissions limitation~~

~~(including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), which would be emitted from a proposed major stationary source or major modification which the cabinet, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for that source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of that pollutant. Application of best available control technology shall not result in emissions of a pollutant which would exceed the emissions allowed by an applicable standard under Title 401, KAR Chapters 57, 59, 60, and 63, or 40 CFR Parts 60, 61, and 63. If the cabinet determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, or operational standard, or combination of design, equipment, work practice, or operational standard, may be prescribed instead to satisfy the requirement for the application of best available control technology. That standard shall, to the degree possible, establish the emissions reduction achievable by implementation of the design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.~~

~~(9) "Building, structure, facility, or installation" means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of a vessel. Pollutant-~~

1 emitting activities shall be considered as part of the same industrial grouping if they  
2 belong to the same major group (i.e., which have the same two (2) digit code) as  
3 described in the Standard Industrial Classification Manual, 1987, which has been  
4 incorporated by reference in Section 21 of this administrative regulation.

5 (10) ~~"Clean coal technology" means a technology, including technologies~~  
6 ~~applied at the precombustion, combustion, or post-combustion stage, at a new or~~  
7 ~~existing facility which will achieve significant reductions in air emissions of sulfur~~  
8 ~~dioxide or oxides of nitrogen associated with the utilization of coal in the generation of~~  
9 ~~electricity, or process steam which was not in widespread use as of November 15,~~  
10 ~~1990.~~

11 (11) ~~"Clean coal technology demonstration project" means a project using~~  
12 ~~funds appropriated under the heading "Department of Energy - Clean Coal~~  
13 ~~Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of~~  
14 ~~clean coal technology, or a similar project funded through appropriations for the U.S.~~  
15 ~~EPA. The federal contribution for a qualifying project shall be at least twenty (20)~~  
16 ~~percent of the total cost of the demonstration project.~~

17 (12) ~~"Commence", for construction of a major stationary source or major~~  
18 ~~modification, means that the owner or operator has all necessary preconstruction~~  
19 ~~approvals or permits and either has:~~

20 (a) ~~Begun, or caused to begin, a continuous program of actual on-site~~  
21 ~~construction of the source, to be completed within a reasonable time; or~~

22 (b) ~~Entered into agreements or contractual obligations, which cannot be~~  
23 ~~cancelled or modified without substantial loss to the owner or operator, to undertake a~~



1 ~~program of actual construction of the source to be completed within a reasonable time.~~

2 ~~(13) "Complete" means, in reference to an application for a permit, that the~~  
3 ~~application contains information necessary for processing the application. Designating~~  
4 ~~an application complete for permit processing does not preclude the cabinet from~~  
5 ~~requesting or accepting additional information.~~

6 ~~(14) "Construction" means any physical change or change in the method of~~  
7 ~~operation (including fabrication, erection, installation, demolition, or modification of an~~  
8 ~~emissions unit) which would result in a change in actual emissions.~~

9 ~~(15) "Electric utility steam generating unit" means a steam electric generating~~  
10 ~~unit that is constructed for the purpose of supplying more than one-third (1/3) of its~~  
11 ~~potential electric output capacity and more than twenty-five (25) megawatt electrical~~  
12 ~~output to a utility power distribution system for sale. Steam supplied to a steam~~  
13 ~~distributing system for the purpose of providing steam to a steam electric generator~~  
14 ~~producing electric energy for sale is also considered in determining the electrical~~  
15 ~~energy output capacity of the affected facility.~~

16 ~~(16) "Emissions unit" means a part of a stationary source which emits or would~~  
17 ~~have the potential to emit a pollutant subject to regulation under 42 USC 7401 to 7671q~~  
18 ~~(Clean Air Act).~~

19 ~~(17) "Federal land manager" means, for lands in the United States, the~~  
20 ~~secretary of the department with authority over those lands.~~

21 ~~(18) "Federally enforceable" means all limitations and conditions which are~~  
22 ~~enforceable by the U.S. EPA, including those requirements developed pursuant to 40~~  
23 ~~CFR 60, 61, and 63, requirements within an applicable State Implementation Plan (SIP)~~

1 and any permit requirements established pursuant to 40 CFR 52.21, or under  
2 regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating  
3 permits issued under an EPA-approved program incorporated into the SIP, which  
4 expressly requires adherence to a permit issued under the program.

5 (19) "Fugitive emissions" means those emissions which could not reasonably  
6 pass through a stack, chimney, vent, or other functionally equivalent opening.

7 (20) "High terrain" means an area having an elevation of 900 feet or more  
8 above the base of the stack of a source.

9 (21) "Innovative control technology" means a system of air pollution control  
10 that has not been adequately demonstrated in practice, but would have a substantial  
11 likelihood of achieving greater continuous emissions reduction than any control system  
12 in current practice or of achieving at least comparable reductions at lower cost in terms  
13 of energy, economics, or nonair quality environmental impacts.

14 (22) "Low terrain" means an area other than high terrain.

15 (23) "Major modification" means a physical change in or change in the method  
16 of operation of a major stationary source that would result in a significant net emissions  
17 increase of any pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air  
18 Act).

19 (a) A net emissions increase that is significant for volatile organic compounds  
20 shall be significant for ozone.

21 (b) A physical change or change in the method of operation shall not include:

22 1. Routine maintenance, repair and replacement;

23 2. Use of alternative fuel or raw material by reason of an order or a natural

~~gas curtailment plan in effect under a federal act;~~

~~3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;~~

~~4. Use of an alternative fuel or raw material by a stationary source which:~~

~~a. The source was capable of accommodating before January 6, 1975, unless the change would be prohibited under a permit condition which was established after January 6, 1975; or~~

~~b. The source is approved to use under a permit issued under this administrative regulation or under 40 CFR 52.21;~~

~~5. An increase in the hours of operation or in the production rate, unless the change would be prohibited after January 6, 1975, pursuant to 40 CFR 52.21; after June 6, 1979, pursuant to 401 KAR 51:015; after September 22, 1982, pursuant to this administrative regulation; or under 401 KAR 52:020 and 401 KAR 51:016E; or~~

~~6. A change in ownership at a stationary source.~~

~~7. The addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the cabinet, concurring with U.S. EPA, determines that such addition, replacement, or use renders the unit less environmentally beneficial, unless:~~

~~a. The cabinet has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of a criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of 42 USC 7401 to 7515 (Title I of the Clean Air Act), if any; and~~

1        ~~b. The cabinet determines that the increase will cause or contribute to a~~  
2 ~~violation of any national ambient air quality standard or prevention of significant~~  
3 ~~deterioration (PSD) increment or visibility limitation.~~

4        ~~8. The installation, operation, cessation, or removal of a temporary clean~~  
5 ~~coal technology demonstration project, if the project complies with the Kentucky SIP~~  
6 ~~and other requirements necessary to attain and maintain the national ambient air~~  
7 ~~quality standards during the project and after it is terminated.~~

8        ~~9. The installation or operation of a permanent clean coal technology~~  
9 ~~demonstration project that constitutes repowering, if the project does not result in an~~  
10 ~~increase in the potential to emit of a regulated pollutant emitted by the unit. This~~  
11 ~~exemption shall apply on a pollutant-by-pollutant basis.~~

12        ~~10. The reactivation of a very clean coal-fired electric utility steam generating~~  
13 ~~unit.~~

14        ~~(24) "Major source baseline date" means:~~

15        ~~(a) For particulate matter and sulfur dioxide, January 6, 1975; and~~

16        ~~(b) For nitrogen dioxide, February 8, 1988.~~

17        ~~(25)(a) "Major stationary source" means:~~

18        ~~1. Any of the following stationary sources of air pollutants which emits, or~~  
19 ~~has the potential to emit, 100 tons per year or more of a pollutant subject to regulation~~  
20 ~~under 42 USC 7401 to 7671q (Clean Air Act): fossil fuel-fired steam electric plants of~~  
21 ~~more than 250 million BTU per hour heat input, coal cleaning plants (with thermal~~  
22 ~~dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel~~  
23 ~~mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal~~

~~incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combination of fossil fuel boilers) totaling more than 250 million BTU per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;~~

~~2. Notwithstanding the stationary source size specified in subparagraph 1 of this paragraph, a stationary source which emits, or has the potential to emit, 250 tons per year or more of an air pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act); or~~

~~3. Any physical change that would occur at a stationary source not otherwise qualifying under this subsection as a major stationary source, if the change would constitute a major stationary source by itself.~~

~~(b) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.~~

~~(c) For this administrative regulation, the fugitive emissions of a stationary source shall not be included in determining if it is a major stationary source, unless the source belongs to one (1) of the following categories of stationary sources:~~

~~1. Coal cleaning plants (with thermal dryers);~~

~~2. Kraft pulp mills;~~

- 1           3. ~~Portland cement plants;~~
- 2           4. ~~Primary zinc smelters;~~
- 3           5. ~~Iron and steel mills;~~
- 4           6. ~~Primary aluminum ore reduction plants;~~
- 5           7. ~~Primary copper smelters;~~
- 6           8. ~~Municipal incinerators capable of charging more than 250 tons of refuse~~
- 7 ~~per day;~~
- 8           9. ~~Hydrofluoric, sulfuric, or nitric acid plants;~~
- 9           10. ~~Petroleum refineries;~~
- 10          11. ~~Lime plants;~~
- 11          12. ~~Phosphate rock processing plants;~~
- 12          13. ~~Coke oven batteries;~~
- 13          14. ~~Sulfur recovery plants;~~
- 14          15. ~~Carbon black plants (furnace process);~~
- 15          16. ~~Primary lead smelters;~~
- 16          17. ~~Fuel conversion plants;~~
- 17          18. ~~Sintering plants;~~
- 18          19. ~~Secondary metal production plants;~~
- 19          20. ~~Chemical process plants;~~
- 20          21. ~~Fossil fuel boilers (or combination of fossil fuel boilers) totaling more than~~
- 21 ~~250 million BTUs per hour heat input;~~
- 22          22. ~~Petroleum storage and transfer units with a total storage capacity~~
- 23 ~~exceeding 300,000 barrels;~~

1       ~~23.—Taconite ore processing plants;~~  
2       ~~24.—Glass fiber processing plants;~~  
3       ~~25.—Charcoal production plants;~~  
4       ~~26.—Fossil fuel-fired steam electric plants of more than 250 million BTUs per~~  
5 ~~hour heat input; and~~

6       ~~27.—Any stationary source category which, as of August 7, 1980, is being~~  
7 ~~regulated under 401 KAR Chapters 57, 59, 60, and 63; 40 CFR Parts 60, 61, and 63; or~~  
8 ~~42 USC 7411 or 7412 (Section 111 or 112 of the Clean Air Act).~~

9       ~~(26)—"Mandatory Class I federal area" means an area identified in 40 CFR 81,~~  
10 ~~Subpart D, where the administrator of the U.S. EPA, in consultation with the Secretary~~  
11 ~~of the United States Department of Interior, has determined visibility to be an important~~  
12 ~~value.~~

13       ~~(27)(a) —"Minor source baseline date" means the earliest date after the~~  
14 ~~trigger date on which a major stationary source or a major modification subject to 40~~  
15 ~~CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete~~  
16 ~~application under the relevant regulations. The trigger date shall be:~~

17       ~~1.—For particulate matter and sulfur dioxide, August 7, 1977; and~~

18       ~~2.—For nitrogen dioxide, February 8, 1988.~~

19       ~~(b)—A minor source baseline date established originally for the TSP~~  
20 ~~increments shall remain in effect and shall apply in determining the amount of available~~  
21 ~~PM<sub>10</sub> increments, except that the cabinet may rescind the minor source baseline date if~~  
22 ~~it can be shown, to the satisfaction of the cabinet, that the emissions increase from the~~  
23 ~~major modification responsible for triggering that date did not result in a significant~~

1 amount of PM<sub>10</sub> emissions.

2 ~~(28) "Natural conditions" means those naturally occurring phenomena that~~  
3 ~~reduce visibility as measured in terms of visual range, contrast, or coloration.~~

4 ~~(29) "Necessary preconstruction approvals or permits" means those permits or~~  
5 ~~approvals required under the regulations of 401 KAR Chapters 50 to 65 and federal air~~  
6 ~~quality control laws and regulations.~~

7 ~~(30)(a) "Net emissions increase" means the amount by which the sum of~~  
8 ~~subparagraphs 1 and 2 of this paragraph exceeds zero:~~

9 ~~1. An increase in actual emissions from a particular physical change or~~  
10 ~~change in method of operation at a stationary source; and~~

11 ~~2. Other increases and decreases in actual emissions at the source that are~~  
12 ~~contemporaneous with the particular change and are otherwise creditable.~~

13 ~~(b) An increase or decrease in actual emissions is contemporaneous with the~~  
14 ~~increase from the particular change only if:~~

15 ~~1. For construction that commences prior to January 6, 2002, it occurs~~  
16 ~~between the date ten (10) years before construction on the particular change~~  
17 ~~commences, and the date that the increase from the particular change occurs.~~

18 ~~2. For construction that commences on and after January 6, 2002, it occurs~~  
19 ~~between the date five (5) years before construction on the particular change~~  
20 ~~commences, and the date that the increase from the particular change occurs.~~

21 ~~(c) An increase or decrease in actual emissions is creditable only if the~~  
22 ~~cabinet or the U.S. EPA has not relied on it in issuing a permit for the source under this~~  
23 ~~administrative regulation or 40 CFR 52.21, if the permit is in effect when the increase in~~



1 actual emissions from the particular change occurs.

2 ~~(d) — An increase or decrease in actual emissions of sulfur dioxide, particulate~~  
3 ~~matter, or nitrogen oxides which occurs before the applicable minor source baseline~~  
4 ~~date is creditable only if it is considered in calculating the amount of maximum~~  
5 ~~allowable increases remaining available. For particulate matter, only PM<sub>40</sub> emissions~~  
6 ~~shall be used to evaluate the net emissions increase for PM<sub>40</sub>.~~

7 ~~(e) — An increase in actual emissions is creditable only to the extent that the~~  
8 ~~new level of actual emissions exceeds the old level.~~

9 ~~(f) — A decrease in actual emissions is creditable only to the extent that:~~

10 ~~1. — The old level of actual emissions or the old level of allowable emissions,~~  
11 ~~whichever is lower, exceeds the new level of actual emissions;~~

12 ~~2. — It is state or federally enforceable from the time that actual construction~~  
13 ~~on the particular change begins; and~~

14 ~~3. — It has approximately the same qualitative significance for public health~~  
15 ~~and welfare as that attributed to the increase from the particular change.~~

16 ~~(g) — An increase that results from a physical change at a source occurs when~~  
17 ~~the emissions unit on which construction occurred becomes operational and begins to~~  
18 ~~emit a particular pollutant. A replacement unit that requires shakedown becomes~~  
19 ~~operational only after a reasonable shakedown period, not to exceed 180 days.~~

20 ~~(31) — "Pollution control project" means an activity or project undertaken at an~~  
21 ~~existing electric utility steam generating unit in order to reduce emissions from that unit.~~  
22 ~~Such activities and projects are limited to:~~

23 ~~(a) — The installation of conventional or innovative pollution control technology;~~

1 including but not limited to advanced flue gas desulfurization, sorbent injection for  
2 sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;

3 (b) ~~— An activity or project to accommodate switching to a fuel that is less~~  
4 ~~polluting than the fuel used prior to the activity or project, including but not limited to~~  
5 ~~natural gas or coal reburning, or the co-firing of natural gas and other fuels for the~~  
6 ~~purpose of controlling emissions;~~

7 (c) ~~— A permanent clean coal technology demonstration project conducted~~  
8 ~~under 42 USC 5903(d) (Title II, section 101(d), of the Further Continuing~~  
9 ~~Appropriations Act of 1985) or subsequent appropriations, up to a total of~~  
10 ~~\$2,500,000,000 for commercial demonstration of clean coal technology, or similar~~  
11 ~~projects funded through appropriations for the U.S. Environmental Protection Agency;~~

12 or

13 (d) ~~— A permanent clean coal technology demonstration project that constitutes~~  
14 ~~a repowering project.~~

15 (32) ~~—"Potential to emit" means the maximum capacity of a stationary source to~~  
16 ~~emit a pollutant under its physical or operational design. A physical or operational~~  
17 ~~limitation on the capacity of the source to emit a pollutant, including air pollution control~~  
18 ~~equipment and restrictions on hours of operation or on the type or amount of material~~  
19 ~~combusted, stored, or processed, shall be treated as part of its design if the limitation~~  
20 ~~or the effect it would have on emissions is state or federally enforceable. Secondary~~  
21 ~~emissions shall not count in determining the potential to emit of a stationary source.~~

22 (33) ~~—"Reactivation of a very clean coal fired electric utility steam generating~~  
23 ~~unit" means a physical change or change in the method of operation associated with~~

1 the commencement of commercial operations by a coal-fired utility unit after a period of  
2 discontinued operation if the unit:

3 (a) ~~Has not been in operation for the two (2) year period between November~~  
4 ~~15, 1988, and November 15, 1990, and the emissions from that unit continue to be~~  
5 ~~carried in the Kentucky emissions inventory after November 15, 1990;~~

6 (b) ~~Was equipped prior to shutdown with a continuous system of emissions~~  
7 ~~control achieving a removal efficiency for sulfur dioxide of no less than eighty-five (85)~~  
8 ~~percent and a removal efficiency for particulates of no less than ninety-eight (98)~~  
9 ~~percent;~~

10 (c) ~~Is equipped with low-NO<sub>x</sub> burners prior to the time of commencement of~~  
11 ~~operations following reactivation; and~~

12 (d) ~~Is otherwise in compliance with the requirements of 42 USC 7401 to~~  
13 ~~7671q (Clean Air Act).~~

14 (34)(a) ~~"Repowering" means replacement of an existing coal-fired boiler~~  
15 ~~with one (1) of the following clean coal technologies: atmospheric or pressurized~~  
16 ~~fluidized bed combustion, integrated gasification combined cycle,~~  
17 ~~magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification~~  
18 ~~fuel cells, or as determined by the Administrator of U.S. EPA in consultation with the~~  
19 ~~Secretary of Energy, a derivative of one or more of these technologies, or another~~  
20 ~~technology capable of controlling multiple combustion emissions simultaneously with~~  
21 ~~improved boiler or generation efficiency and with significantly greater waste reduction~~  
22 ~~relative to the performance of technology in widespread commercial use as of~~  
23 ~~November 15, 1990.~~

1       ~~(b) Repowering shall also include an oil or gas-fired unit which has been~~  
2       ~~awarded clean coal technology demonstration funding as of January 1, 1991 by the~~  
3       ~~Department of Energy.~~

4       ~~(c) The cabinet shall give expedited consideration to a permit application~~  
5       ~~from a source that satisfies the requirements of this subsection and is granted an~~  
6       ~~extension under 42 USC 7651h (Section 409 of the Clean Air Act).~~

7       ~~(35) "Representative actual annual emissions" means the average rate, in tons~~  
8       ~~per year, at which the source is projected to emit a pollutant for the two (2) year period~~  
9       ~~after a physical change or change in the method of operation of a unit (or a different~~  
10       ~~consecutive two (2) year period within ten (10) years after that change, if the cabinet~~  
11       ~~determines that this period is more representative of normal source operations),~~  
12       ~~considering the effect the change will have on increasing or decreasing the hourly~~  
13       ~~emissions rate and on projected capacity utilization. In projecting future emissions the~~  
14       ~~cabinet shall:~~

15       ~~(a) Consider all the relevant information, including but not limited to,~~  
16       ~~historical operational data, the company's own representations, filings with local, state,~~  
17       ~~or federal regulatory authorities, and compliance plans under 42 USC 7651 to 7651e~~  
18       ~~(Title IV of the Clean Air Act); and~~

19       ~~(b) Exclude, in calculating an increase in emissions that results from the~~  
20       ~~particular physical change or change in method of operation at an electric utility steam~~  
21       ~~generating unit, that portion of the unit's emissions following the change that could~~  
22       ~~have been accommodated during the representative baseline period and is attributable~~  
23       ~~to an increase in projected capacity utilization at the unit that is unrelated to the~~

1 particular change, including any increased utilization due to the rate of electricity  
2 demand growth for the utility system as a whole.

3 (36) ~~"Secondary emissions" means emissions which would occur as a result of~~  
4 ~~the construction or operation of a major stationary source or major modification, but do~~  
5 ~~not come from the major stationary source or major modification itself. For this~~  
6 ~~administrative regulation, secondary emissions shall be specific, well defined,~~  
7 ~~quantifiable, and impact the same general area as the stationary source or modification~~  
8 ~~which causes the secondary emissions. Secondary emissions include emissions from~~  
9 ~~an off-site support facility which would not be constructed or increase its emissions~~  
10 ~~except as a result of the construction or operation of the major stationary source or~~  
11 ~~major modification. Secondary emissions shall not include emissions which come from~~  
12 ~~a mobile source, (e.g., the emissions from the tailpipe of a motor vehicle, from a train,~~  
13 ~~or from a vessel).~~

14 (37) ~~"Significant" means:~~

15 (a) ~~In reference to a net emissions increase or the potential of a source to~~  
16 ~~emit a pollutant listed in Section 22 of this administrative regulation, a rate of emissions~~  
17 ~~that would equal or exceed a rate given in Section 22 of this administrative regulation.~~

18 (b) ~~In reference to a net emissions increase or the potential of a source to~~  
19 ~~emit a pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), that~~  
20 ~~is not listed in Section 22 of this administrative regulation, any emissions rate.~~

21 (c) ~~Notwithstanding paragraph (b) of this subsection and Section 22 of this~~  
22 ~~administrative regulation, "significant" means an emissions rate or net emissions~~  
23 ~~increase associated with a major stationary source or major modification which is to be~~

constructed within ten (10) kilometers of a Class I area and has an impact on that area equal to or greater than one (1)  $\mu\text{g}/\text{m}^3$  (twenty-four (24) hour average).

(38) "Stationary source" means a building, structure, facility, or installation which emits or may emit an air pollutant subject to regulation under the 42 USC 7401 to 7671q (Clean Air Act).

(39) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five (5) years or less, and which complies with the Kentucky SIP and with other requirements necessary to attain and maintain the national ambient air quality standards during and after the project is terminated.

(40) "Visibility impairment" means a humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions.]

**Section 1 [2]. Applicability.** (1) This administrative regulation shall apply to the construction of a new [a] major stationary source or any project at an existing major stationary source that commences construction after September 22, 1982, and locates in an area designated attainment or unclassifiable under 42 U.S.C. 7407(d)(1)(A)(ii) and (iii). [major modification which:

(1) commenced construction after September 22, 1982;]

(2) Except as otherwise provided in this administrative regulation, the provisions of Sections 8 to 16 of this administrative regulation shall apply to the construction of a new major stationary source or a major modification of an existing major stationary source. [Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean

1 ~~Air Act); and]~~

2       (3) The owner or operator of a new major stationary source or major  
3 modification, which is subject to the requirements of Sections 8 to 16 of this  
4 administrative regulation, shall not begin actual construction without a permit or permit  
5 revision issued under 401 KAR 52:020 stating that the major stationary source or major  
6 modification shall meet those requirements. ~~[Is constructed in an area designated as~~  
7 ~~attainment or unclassifiable for a pollutant as defined pursuant to 42 USC~~  
8 ~~7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area~~  
9 ~~designations are contained in 40 CFR 81.318.]~~

10       (4) Applicability tests for projects. Except as provided in subsections (5) or  
11 (6) of this section, a project shall be a major modification for a regulated NSR pollutant  
12 only if the project causes a significant emissions increase and a significant net  
13 emissions increase as provided in paragraphs (a) and (b) of this subsection.

14       (a) Prior to beginning actual construction, the owner or operator shall first  
15 determine if a significant emissions increase will occur for the applicable type of unit  
16 being constructed according to subparagraphs 1 to 4 of this paragraph.

17       1. Actual-to-projected actual applicability test for projects that only involve  
18 existing emissions units. A significant emissions increase of a regulated NSR pollutant  
19 shall be projected to occur if the sum of the difference between the projected actual  
20 emissions and the baseline actual emissions for each existing emissions unit equals or  
21 exceeds the significant amount for that pollutant.

22       2. Actual-to-potential test for projects that involve only construction of new  
23 emissions units. A significant emissions increase of a regulated NSR pollutant shall be

1 projected to occur if the sum of the potential to emit from each new emissions unit  
2 following completion of the project equals or exceeds the significant amount for that  
3 pollutant.

4 3. Emissions test for projects that involve Clean Units. An emission increase  
5 shall not be deemed to occur for a project that will be constructed and operated at a  
6 Clean Unit without causing the unit to lose its Clean Unit designation as provided in  
7 Sections 20 and 21 of this administrative regulation.

8 4. Hybrid test for projects that involve multiple types of emissions units. A  
9 significant emissions increase of a regulated NSR pollutant shall be projected to occur  
10 if the sum of the emissions increases for each emissions unit, using a method specified  
11 in subparagraphs 1 to 3 of this paragraph as applicable for each emissions unit, equals  
12 or exceeds the significant amount for that pollutant.

13 (b) Prior to beginning actual construction and after completing the applicable  
14 procedure of paragraph (a) of the subsection, the owner or operator shall determine for  
15 each regulated NSR pollutant if a significant net emissions increase will occur pursuant  
16 to 401 KAR 51:001, Section 1(146).

17 (5) For a plantwide applicability limit (PAL) for a regulated NSR pollutant at a  
18 major stationary source, the owner or operator of the major stationary source shall  
19 comply with the applicable requirements of Section 23 of this administrative regulation.

20 (6) An owner or operator undertaking a pollution control project (PCP) shall  
21 comply with Section 22 of this administrative regulation.

22 **Section 2 [3]. Ambient Air Increments. (1)** In areas designated as  
23 Class I or II, increases in pollutant concentration over the baseline concentration shall



- 1 be limited to the following levels:

<u>Pollutant</u>	<u>Maximum Allowable Increase (Micrograms per cubic meter)</u>
<u>Class I</u>	
<u>Particulate Matter:</u>	
<u>PM<sub>10</sub>, annual arithmetic mean</u>	<u>4</u>
<u>PM<sub>10</sub>, 24-hour maximum</u>	<u>8</u>
<u>Sulfur Dioxide:</u>	
<u>Annual arithmetic mean</u>	<u>2</u>
<u>24-hour maximum</u>	<u>5</u>
<u>3-hour maximum</u>	<u>25</u>
<u>Nitrogen Dioxide:</u>	
<u>Annual arithmetic mean</u>	<u>2.5</u>
<u>Class II</u>	
<u>Particulate Matter:</u>	
<u>PM<sub>10</sub>, annual arithmetic mean</u>	<u>17</u>
<u>PM<sub>10</sub>, 24-hour maximum</u>	<u>30</u>
<u>Sulfur Dioxide:</u>	
<u>Annual arithmetic mean</u>	<u>20</u>
<u>24-hour maximum</u>	<u>91</u>
<u>3-hour maximum</u>	<u>512</u>
<u>Nitrogen Dioxide:</u>	
<u>Annual arithmetic mean</u>	<u>25</u>

- 2 [specified in Section 23 of this administrative regulation.]

(2) For any [a] period other than an annual period, the applicable maximum allowable increase may be exceeded during one (1) such period per year at any one (1) location.

**Section 3 [4]. Ambient Air Ceilings.** ~~The~~ [No] concentration of a regulated NSR pollutant ~~[specified in Section 2 of this administrative regulation]~~ shall not exceed the concentration allowed under the national secondary ambient air quality standard or under the national primary ambient air quality standard, whichever concentration is lower for the pollutant for a period of exposure.[:]

~~[(1) The concentration allowed [permitted] under the national secondary ambient air quality standard; or~~

~~(2) The concentration allowed [permitted] under the national primary ambient air quality standard, whichever concentration is lower for the pollutant for a period of exposure.]~~

**Section 4 [5]. Restrictions on Area Classifications.** (1) The following areas which were in existence on August 7, 1977, shall be Class I areas and shall not be redesignated:

(a) International parks;

(b) National wilderness areas and national memorial parks which exceed 5,000 acres in size; and

(c) National parks which exceed 6,000 acres in size.

(2) Any other area, unless otherwise specified in the legislation creating the area, is designated Class II but may be redesignated as provided in 40 C.F.R. [CFR] 51.166(g).

(3) The visibility protection requirements of this administrative regulation shall apply only to sources, which may impact a mandatory Class I federal area.

(4) The following areas may be redesignated only as Class I or II:

(a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

**Section 5 [6]. Exclusions from Increment Consumption.** (1) The cabinet may, after notice and opportunity for at least one (1) public hearing to be held in accordance with procedures established in 401 KAR 52:100, exclude the following concentrations in determining compliance with a maximum allowable increase:

(a) Concentrations attributable to the increase in emissions from stationary sources that have ~~[which have been]~~ converted from the use of petroleum products, natural gas, or both by reason of an order in effect under a federal statute or regulation over the emissions from these ~~[the]~~ sources before the effective date of the order;

(b) Concentrations attributable to the increase in emissions from sources that ~~[which]~~ have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to a ~~[the]~~ federal statute over the emissions from those sources before the effective date of the plan;

(c) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or

1 modified sources; and

2 (d) Concentrations attributable to the temporary increase in emissions of  
3 sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources that ~~[which]~~  
4 are affected by plan revisions approved by the Administrator of the U.S. EPA as  
5 meeting the criteria specified in subsection (3) ~~[(4)]~~ of this section.

6 (2) Exclusion of concentrations shall not apply more than five (5) years after  
7 the effective date of the order to which subsection (1)(a) of this section refers or the  
8 curtailment plan to which subsection (1)(b) of this section refers, whichever is  
9 applicable. If both an order and curtailment plan are applicable, an ~~[no]~~ exclusion shall  
10 not apply more than five (5) years after the later of the two (2) effective dates.

11 (3) For excluding concentrations pursuant to subsection (1)(d) of this section;  
12 ~~[, the SIP revision shall specify the following provisions:]~~

13 (a) The time period over which the temporary emissions ~~[emission]~~ increase  
14 of sulfur dioxide, particulate matter, or nitrogen oxides would occur shall be specified  
15 and ~~[The time period]~~ shall not exceed two (2) years in duration unless a longer time  
16 is approved by the U.S. EPA;

17 (b) The time period for excluding certain contributions in accordance with  
18 paragraph (a) of this subsection shall not be ~~[is not]~~ renewable;

19 (c) An emissions increase from a stationary source shall not occur that will:  
20 ~~[No emissions increase will occur from a stationary source which would]:~~

21 1. Impact a Class I area or an area in which ~~[where]~~ an applicable increment  
22 is known to be violated; or

23 2. Cause or contribute to the violation of a national ambient air quality

1 standard; and

2 (d) Limitations shall be in effect at the end of the time period established in  
3 paragraph (a) of this subsection, which ensure that the emissions levels from stationary  
4 sources affected by the SIP revision shall [will] not exceed the [these] levels occurring  
5 from those sources before the revision was approved.

6 **Section 6 [7]. Stack Heights.** (1) The degree of emissions  
7 [emission] limitation required for control of an air pollutant under this administrative  
8 regulation shall not be affected by:

9 (a) So much of the stack height of a source as exceeds good engineering  
10 practice; or

11 (b) Another dispersion technique.

12 (2) Subsection (1) of this section shall not apply to stack heights in existence  
13 before December 31, 1970, or to dispersion techniques implemented before then.

14 **Section 7. Exemptions. [~~Section 8. Review of Major Stationary Sources~~**  
15 **~~and Major Modifications; Source Applicability and Exemptions.~~**

16 (1) ~~A major stationary source or major modifications to which Sections 9 to 17~~  
17 ~~of this administrative regulation apply shall not begin actual construction until it obtains~~  
18 ~~a permit stating that the stationary source or modification shall comply with Sections 9~~  
19 ~~to 17 of this administrative regulation.~~

20 (2) ~~Sections 9 to 17 of this administrative regulation shall apply to a major~~  
21 ~~stationary source and major modification for each pollutant that it would emit which is~~  
22 ~~subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), except as required~~  
23 ~~in Section 2 of this administrative regulation.~~

~~(3) Sections 9 to 17 of this administrative regulation shall apply only to a major stationary source or major modification that will be constructed in an area designated as attainment or unclassifiable pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act).~~

[(4)] Sections 8 to 16 ~~[9 to 17]~~ of this administrative regulation shall not apply to a particular major stationary source or major modification, if:

(a) The owner or operator:

1. Obtained the necessary federal, state, and local preconstruction approval effective before September 22, 1982;

2. Commenced construction before September 22, 1982; and

3. Did not discontinue construction for a period of eighteen (18) months or more. ~~[; or]~~

(b) The major stationary source is ~~[or modification would be]~~ a nonprofit health institution, a ~~[or]~~ nonprofit educational institution, or a major modification ~~[would occur]~~ at such an ~~[the]~~ institution, and the Governor of the Commonwealth of Kentucky requests that it be exempt from those requirements. ~~[;]~~

(c) The source or modification is ~~[would be]~~ a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

1. Coal cleaning plants ~~[{]with thermal dryers[}]~~;

2. Kraft pulp mills;

3. Portland cement plants;

- 1           4.     Primary zinc smelters;
- 2           5.     Iron and steel mills;
- 3           6.     Primary aluminum ore reduction plants;
- 4           7.     Primary copper smelters;
- 5           8.     Municipal incinerators capable of charging more than 250 tons of refuse
- 6     per day;
- 7           9.     Hydrofluoric, sulfuric, or nitric acid plants;
- 8           10.    Petroleum refineries;
- 9           11.    Lime plants;
- 10          12.    Phosphate rock processing plants;
- 11          13.    Coke oven batteries;
- 12          14.    Sulfur recovery plants;
- 13          15.    Carbon black plants, [furnace process];
- 14          16.    Primary lead smelters;
- 15          17.    Fuel conversion plants;
- 16          18.    Sintering plants;
- 17          19.    Secondary metal production plants;
- 18          20.    Chemical process plants;
- 19          21.    Fossil-fuel boilers, [or combination of fossil-fuel boilers, ] totaling more
- 20     than 250 million BTUs per hour heat input;
- 21          22.    Petroleum storage and transfer units with a total storage capacity
- 22     exceeding 300,000 barrels;
- 23          23.    Taconite ore processing plants;

24. Glass fiber processing plants;

25. Charcoal production plants;

26. Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; or

27. Another stationary source category which, as of August 7, 1980, is being regulated under 42 U.S.C. [USC] 7411 or 7412, [~~Section 111 or 112 of the Clean Air Act~~]; or]

(d) The source or modification is a portable stationary source that [which] has previously received a permit under this administrative regulation; and[:]

1. The owner or operator proposes to relocate the source and emissions of the source at the new location will [would] be temporary;

2. The emissions from the source will [would] not exceed its allowable emissions;

3. The emissions from the source will [would] not impact a Class I area or an area where an applicable increment is known to be violated; and

4. Reasonable notice is given to the cabinet prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Notice shall be given to the cabinet not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the cabinet.

(e) The source or modification was not subject to this administrative regulation with respect to particulate matter requirements in effect before July 31, 1987, and the owner or operator:



1           1.       Obtained all final federal, state, and local preconstruction approvals or  
2 permits necessary under the applicable SIP ~~[state implementation plan]~~ before July 31,  
3 1987;

4           2.       Commenced construction within eighteen (18) months after July 31, 1987;  
5 and

6           3.       Did not discontinue construction for a period of eighteen (18) months or  
7 more and completed construction within a reasonable period of time.

8           (f)       The source or modification was subject to this administrative regulation  
9 for ~~[with respect to]~~ particulate matter requirements~~[-as]~~ in effect before July 31, 1987,  
10 ~~[and]~~ the owner or operator submitted an application for a permit under the applicable  
11 permit program ~~[this administrative regulation]~~ before that date, and the cabinet  
12 subsequently determined that the application as submitted was complete with respect  
13 to the particulate matter requirements then in effect ~~[in this administrative regulation]~~.  
14 ~~[If not, the requirements of Sections 9 to 17 of this administrative regulation that were in~~  
15 ~~effect before July 31, 1987, shall apply to the source or modification.]~~

16           ~~(2) [(5)]~~       Sections 8 to 16 ~~[9 to 17]~~ of this administrative regulation shall not  
17 apply to a major stationary source or major modification for ~~[with respect to]~~ a particular  
18 pollutant if the owner or operator demonstrates that, for that pollutant, the source or  
19 modification is located in an area designated as nonattainment pursuant to 42 U.S.C.  
20 ~~[USC]~~ 7407(d)(1)(A)(i) ~~[(Section 107(d)(1)(A)(i) of the Clean Air Act)]~~.

21           ~~(3) [(6)]~~       Sections 9, 11, and 13 ~~[10, 12 and 14]~~ of this administrative  
22 regulation shall not apply to a proposed major stationary source or major modification  
23 for ~~[with respect to]~~ a particular pollutant, if the allowable emissions of that pollutant

from the source, or the net emissions increase of that pollutant from a modification [the modifications]:

(a) Will not impact a Class I area or an area where an applicable increment is known to be violated; and

(b) Will be temporary.

~~(4)~~~~(7)~~ Sections 9, 11, and 13 ~~[10, 12 and 14]~~ of this administrative regulation, as applicable ~~[they apply]~~ to a maximum allowable increase for a Class II area, shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant ~~[subject to regulation under 42 U.S.C 7401 to 7671q (Clean Air Act),]~~ from the modification after the application of BACT ~~[best available control technology]~~ will be less than fifty (50) tons per year.

~~(5)~~~~(8)~~ The cabinet may exempt a proposed major stationary source or major modification from the monitoring requirements of Section 11 ~~[12]~~ of this administrative regulation for a particular pollutant, if:

(a) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification will cause air quality impacts in an area, which are less than the amounts listed in the following table; or

<u>Pollutant</u>	<u>Air Quality Level</u>	<u>Averaging Time</u>
<u>Carbon monoxide</u>	<u>575 µg/m<sup>3</sup></u>	<u>8-hour average</u>
<u>Nitrogen dioxide</u>	<u>14 µg/m<sup>3</sup></u>	<u>annual average</u>
<u>Particulate matter</u>	<u>10 µg/m<sup>3</sup> of PM<sub>10</sub></u>	<u>24-hour average</u>
<u>Sulfur dioxide</u>	<u>13 µg/m<sup>3</sup></u>	<u>24-hour average</u>

<u>Ozone</u>	<u>No de minimis air quality level is provided for ozone. However, a net increase of 100 tons per year or more of volatile organic compounds subject to this administrative regulation is required to perform an ambient impact analysis including the gathering of ambient air quality data.</u>	
<u>Lead</u>	<u>0.1 µg/m<sup>3</sup></u>	<u>3-month average</u>
<u>Mercury</u>	<u>0.25 µg/m<sup>3</sup></u>	<u>24-hour average</u>
<u>Beryllium</u>	<u>0.001 µg/m<sup>3</sup></u>	<u>24-hour average</u>
<u>Fluorides</u>	<u>0.25 µg/m<sup>3</sup></u>	<u>24-hour average</u>
<u>Vinyl chloride</u>	<u>15 µg/m<sup>3</sup></u>	<u>24-hour average</u>
<u>Hydrogen sulfide</u>	<u>0.2 µg/m<sup>3</sup></u>	<u>1-hour average</u>
<u>Total reduced sulfur</u>	<u>10 µg/m<sup>3</sup></u>	<u>1-hour average</u>
<u>Reduced sulfur compounds</u>	<u>10 µg/m<sup>3</sup></u>	<u>1-hour average</u>

1           ~~[-given in Section 24 of this administrative regulation;or]~~

2           (b)    The concentrations of the pollutant in the area that the source or  
3   modification will ~~[would]~~ affect are less than the concentrations listed in the table in  
4   paragraph (a) of this subsection ~~[Section 24 of this administrative regulation]~~, or the  
5   pollutant is not listed in the table ~~[Section 24 of this administrative regulation]~~.

6           (6)    Permitting requirements equivalent to Section 9(2) of this administrative  
7   regulation shall not apply to a stationary source or modification for a maximum  
8   allowable increase for nitrogen oxides, if:

9           (a)    The owner or operator of the source or modification submitted an  
10   application for a permit or permit revision under the applicable permit program before  
11   the date on which the provisions embodying the maximum allowable increase took

1 effect in the Kentucky SIP; and

2 (b) The cabinet subsequently determined that the application as submitted  
3 before that date was complete.

4 (7) Permitting requirements equivalent to Section 10(2) of this administrative  
5 regulation shall not apply to a stationary source or modification for a maximum  
6 allowable increase for PM<sub>10</sub>, if:

7 (a) The owner or operator of the source or modification submitted an  
8 application for a permit under the applicable permit program before the provisions  
9 embodying the maximum allowable increases for PM<sub>10</sub> took effect as part of Kentucky's  
10 SIP; and

11 (b) The cabinet subsequently determined that the application as submitted  
12 before that date was complete.

13 (8)(a)[(9)(a)] The cabinet may determine that [At the discretion of the cabinet,]  
14 the requirements for air quality monitoring of PM<sub>10</sub> in Section 11 [42] of this  
15 administrative regulation shall [may] not apply to a particular source or modification, if:

16 1. The owner or operator of the source or modification submitted an  
17 application for a permit under this section on or before June 1, 1988; and [,-and]

18 2. The cabinet subsequently determines that the application as submitted  
19 before that date was complete, except for the requirements for monitoring particulate  
20 matter specified in Section 11 [42] of this administrative regulation.

21 (b) The requirements for air quality monitoring of PM<sub>10</sub> in Section 11 [42] of  
22 this administrative regulation shall apply to a particular source or modification if the  
23 owner or operator of the source or modification submitted an application for a permit

1 under 40 C.F.R. [CFR] 52.21 or this administrative regulation after June 1, 1988, and  
2 no later than December 1, 1988.

3 1. The data shall have been gathered over at least the period from February  
4 1, 1988, to the date the application becomes complete in accordance with Section 11  
5 ~~[42]~~ of this administrative regulation; and ~~[;]~~

6 2. If ~~[unless]~~ the cabinet determines that a complete and adequate analysis  
7 can be accomplished with monitoring data over a shorter period, which may ~~[{]~~not to be  
8 less than four (4) months~~}]~~, the data that Section 11 ~~[42]~~ of this administrative  
9 regulation requires shall have been gathered over that shorter period.

10 ~~(9)[(10)]~~ The requirements of Section 9(2) ~~[40(2)]~~ of this administrative  
11 regulation shall not apply to a stationary source or modification for a ~~[with respect to~~  
12 ~~any]~~ maximum allowable increase for PM<sub>10</sub> if:

13 (a) The owner or operator of the source or modification submitted an  
14 application for a permit under 40 C.F.R. [CFR] 52.21 or this administrative regulation  
15 before the date the provisions embodying the maximum allowable increases for PM<sub>10</sub>  
16 took effect and the cabinet subsequently determined that the application as submitted  
17 before that date was complete.

18 (b) Instead, the requirements of Section 9(2) ~~[40(2)]~~ shall apply for the  
19 maximum allowable increases for TSP as in effect on the day the application was  
20 submitted.

21 ~~(11) The requirements of Section 10(2) of this administrative regulation shall~~  
22 ~~not apply to a stationary source or modification with respect to a maximum allowable~~  
23 ~~increase for nitrogen oxides if the owner or operator of the source or modification~~

submitted an application for a permit under 40 CFR 52.21 or this administrative regulation before the date on which the provisions embodying the maximum allowable increase took effect, and the cabinet subsequently determined that the application as submitted before that date was complete.]

**Section 8 [9]. Control Technology Review.** (1) A major stationary

source or major modification shall meet each applicable emissions limitation under the Kentucky SIP [401 KAR Chapters 50 to 65,] and each applicable emissions [emission] standard and standard of performance under 40 C.F.R. Parts 60 and 61 [40 CFR 60, 61, and 63].

(2) A new major stationary source shall apply BACT [best available control technology] for each regulated NSR pollutant [subject to regulation under 42 USC 7401 to 7671q (Clean Air Act),] for which the source has [that it will have] the potential to emit in significant amounts.

(3) A major modification shall apply BACT:

(a) For each regulated NSR pollutant that results [best available control technology for each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), for which it will result] in a significant net emissions increase at the source; and [; This requirement applies to]

(b) For each proposed emissions unit at which a net emissions increase in the pollutant occurs [will occur] as a result of a physical change or change in the method of operation of the unit.

(4) For phased construction projects; [;]

(a) The cabinet shall review and modify, as appropriate, the BACT

determination ~~[of best available control technology shall be reviewed and modified as appropriate]~~ at the latest reasonable time occurring ~~[which occurs]~~ no later than eighteen (18) months prior to commencement of construction of each independent phase of the project; and ~~[.]~~

(b) The owner or operator of the applicable stationary source may then be required to demonstrate the adequacy of a previous BACT determination ~~[of best available control technology]~~ for the source.

**Section 9 [40]. Source Impact Analysis.** The owner or operator of the proposed source or modification shall demonstrate that allowable emissions ~~[emission]~~ increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions, ~~[including secondary emissions]]~~, shall ~~[will]~~ not cause or contribute to air pollution in violation of:

- (1) A national ambient air quality standard in an air quality control region; or
- (2) An applicable maximum allowable increase over the baseline concentration in any ~~[an]~~ area.

**Section 10 [44]. Air Quality Models.** (1) Estimates of ambient concentrations shall be based on the applicable air quality models, data bases, and other requirements specified in 40 C.F.R. ~~[CFR]~~ Part 51, Appendix W, "Guideline on Air Quality Models" (2003), Appendix A ~~[("Guideline on Air Quality Models (Revised)" (1986), Supplement A (1987), Supplement B (1993), and Supplement C (1996)) incorporated by reference in Section 21 of this administrative regulation].~~

(2) If an air quality model specified in 40 C.F.R. ~~[CFR]~~ Part 51, Appendix W, is inappropriate, the model may be modified or another model substituted.

(a) The use of a modified or substitute model ~~[This change]~~ shall be:

1. Subject to notice and opportunity for public comment under 401 KAR 52:100; and ~~[Section 16 of this administrative regulation.]~~

2. Made on a case-by-case basis and receive written approval from the U.S. EPA ~~[written approval from of the U.S. EPA shall be obtained for a modification or substitution].~~

(b) Methods similar to those outlined in the "Workbook for the Comparison of Air Quality Models," specified in 401 KAR 50:040, Section 1(3), shall be used to determine the comparability of air quality models.

**Section 11 [12]. Air Quality Analysis.** (1) Preapplication analysis.

(a) An application for a permit or permit revisions under 401 KAR 52:020 and this administrative regulation shall contain an analysis of ambient air quality in the area that the major stationary source or major modification will affect for each of the following ~~[pollutants]~~:

1. For a source, each pollutant that the source ~~[it]~~ will have the potential to emit in a significant amount ~~[as defined in Section 1(37) of this administrative regulation]~~;

2. For a modification, each pollutant that the modification ~~[for which it]~~ will result in a significant net emissions increase.

(b) For ~~[With respect to]~~ a pollutant that does not have a ~~[for which no]~~ national ambient air quality standard ~~[exists]~~, the analysis shall contain ~~[the]~~ air quality monitoring data the cabinet determines necessary to assess ambient air quality for that pollutant in an area that the emissions of that pollutant will affect.



1 (c) For pollutants, ~~[(other than nonmethane hydrocarbons,)]~~ for which a  
2 national ambient air quality standard exists ~~[does exist]~~, the analysis shall contain  
3 continuous air quality monitoring data gathered to determine if emissions of that  
4 pollutant will cause or contribute to a violation of the standard or a maximum allowable  
5 increase.

6 (d)1. The required continuous air quality monitoring data shall have been  
7 gathered over a period of at least one (1) year and shall represent at least the year  
8 preceding receipt of the application. ~~[, except that,~~

9 2. If the cabinet determines that a complete and adequate analysis may  
10 ~~[can]~~ be accomplished with monitoring data gathered over a period shorter than one (1)  
11 year, that period shall be ~~[but]~~ not less than four (4) months ~~[(e.g., with data obtained~~  
12 ~~during a time period when maximum air quality levels can be expected), the required~~  
13 ~~data shall have been gathered over at least that shorter period].~~

14 (e) For analysis of volatile organic compounds, ~~[(T]he~~ owner or operator of a  
15 proposed major stationary source or major modification ~~[of volatile organic compounds]~~  
16 who satisfies all conditions of 40 C.F.R. ~~[CFR]~~ Part 51, Appendix S, section IV may  
17 provide postapproval monitoring data for ozone instead ~~[in lieu]~~ of providing  
18 preconstruction data as required in this section ~~[required under paragraphs (a) to (d) of~~  
19 ~~this subsection].~~

20 (f) ~~[For an application that is complete, except for the requirements of~~  
21 ~~paragraphs (c) and (d) of this subsection pertaining to PM<sub>10</sub> after December 1, 1988,~~  
22 ~~and no later than August 1, 1989, the data that paragraph (c) of this subsection~~  
23 ~~requires shall have been gathered over at least the period from August 1, 1988, to the~~

1 ~~date the application becomes otherwise complete, unless the cabinet determines that a~~  
2 ~~complete and adequate analysis can be accomplished with monitoring data over a~~  
3 ~~shorter period (not to be less than four (4) months), the data that paragraph (c) of this~~  
4 ~~subsection requires shall have been gathered over that shorter period.]~~

5 [(g)] For air quality monitoring of PM<sub>10</sub> under Section 7(8)(a) and (b) ~~[8(9)(a)~~  
6 ~~and (b)]~~ of this administrative regulation, the owner or operator of the source or major  
7 modification shall use a monitoring method approved by the cabinet and shall estimate  
8 the ambient concentrations of PM<sub>10</sub> using the data collected by that approved  
9 monitoring method in accordance with estimating procedures approved by the cabinet.

10 (2) Post-construction monitoring. After construction of a major stationary  
11 source or major modification, the owner or operator ~~[of a major stationary source or~~  
12 ~~major modification, after construction of the stationary source or modification,]~~ shall  
13 conduct ~~[the]~~ ambient monitoring that ~~[which]~~ the cabinet determines is necessary to  
14 determine the effect emissions from the stationary source or modification may have, or  
15 are having, on air quality in an area.

16 (3) Operation of monitoring stations. During the operation of air quality  
17 monitoring stations, the owner or operator of a major stationary source or major  
18 modification shall meet the requirements of 40 C.F.R. ~~[GFR]~~ Part 58, Appendix B~~;~~  
19 ~~which is incorporated by reference in Section 21 of this administrative regulation,~~  
20 ~~during the operation of monitoring stations]~~ to satisfy the air quality analysis  
21 requirements of this section ~~[subsections (1) and (2) of this section].~~

22 **Section 12 [13]. Source Information.** The owner or operator of a  
23 proposed source or modification shall submit to the cabinet all information necessary to

perform an analysis or make a determination required under this administrative regulation.

(1) ~~[For a major source or major modification to which Sections 9, 11, 13 and 15 of this administrative regulation apply,]~~ The information shall include:

(a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(b) A detailed schedule for construction of the source or modification; and

(c) A detailed description of the system of continuous emissions ~~[emission]~~ reduction planned for the source or modification, emissions ~~[emission]~~ estimates, and other information necessary to determine that BACT ~~[best available control technology]~~ will be applied.

(2) Upon request of the cabinet, the owner or operator shall also provide information on:

(a) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate the impact; and

(b) The air quality impacts and the nature and extent of general commercial, residential, industrial, and other growth that ~~[which]~~ has occurred since August 7, 1977, in the area the source or modification will affect.

**Section 13 [14]. Additional Impact Analysis.** (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that will ~~[would]~~ occur as a result of:

(a) The source or modification; and

1        (b)     General commercial, residential, industrial and other growth associated  
2 with the source or modification.

3        (2)     The owner or operator shall [is] not be required to provide an analysis of  
4 the impact on vegetation having no significant commercial or recreational value.

5        (3) [~~(2)~~]     The owner or operator shall provide an analysis of the air quality  
6 impact projected for the area as a result of general commercial, residential, industrial  
7 and other growth associated with the source or modification.

8        (4) [~~(3)~~]     Visibility monitoring.        (a)     The cabinet may require  
9 monitoring of visibility in a Class I area impacted by the proposed new stationary  
10 source or major modification using:

11        (1)     Human observations; [;]

12        (2)     Teleradiometers; [;]

13        (3)     Photographic cameras; [;]

14        (4)     Nephelometers; [;]

15        (5)     Fine particulate monitors; [;] or

16        (6)     Other appropriate methods as specified by the U.S. EPA.

17        (b)     The method selected shall be determined on a case-by-case basis by the  
18 cabinet.

19        (c)     Visibility monitoring required by the cabinet in a Class I area shall be  
20 approved by the federal land manager.

21        (d)     Data obtained from visibility monitoring shall be made available to the  
22 cabinet, the U.S. EPA, and the federal land manager, upon request.

23        **Section 14 [~~15~~].     Sources     Impacting     Class     I     Areas;     Additional**

1   **Requirements.**

2           (1)    Notice to U.S. EPA and federal land managers.   The cabinet shall  
3   provide;

4           (a)    Written notice to the U.S. EPA, the federal land manager, and the federal  
5   official charged with direct responsibility for management of lands within a Class I area  
6   of a permit application for a proposed major stationary source or major modification that  
7   ~~[the emissions from which]~~ may affect the Class I area.

8           (b)    ~~[The cabinet shall provide]~~ Notice promptly after receiving the permit  
9   application. The notice shall;

10          1.    Include a copy of all information relevant to the permit application;

11          2.    ~~[and shall]~~ Be given within thirty (30) days of receipt and at least sixty (60)  
12   days prior to the public hearing on the application for a permit to construct; ~~[-The~~  
13   ~~notice shall]~~

14          3.    Include an analysis of the proposed source's anticipated impacts on  
15   visibility in the Class I area.

16          (c)    The cabinet shall also provide the federal land manager and other federal  
17   officials with a copy of the preliminary determination ~~[required under Section X [16] of~~  
18   ~~this administrative regulation,]~~ and shall make available to them the materials used in  
19   making that determination, promptly after the cabinet makes it. The cabinet shall also  
20   notify all affected federal land managers within thirty (30) days of receipt of an  
21   advanced notification of the permit application.

22          (2)    Federal land manager.   The federal land manager and the federal  
23   official charged with direct responsibility for management of lands located in a Class I

1 area shall have an affirmative responsibility to protect ~~[the]~~ visibility and other air  
2 quality related values ~~[(including visibility)]~~ of the lands and to consider, in consultation  
3 with the cabinet, ~~if~~ whether a proposed source or modification will have an adverse  
4 impact on those values.

5 (3) Visibility analysis. (a) The cabinet shall consider an analysis  
6 performed by the federal land manager, which is provided within thirty (30) days of the  
7 notice and analysis required by subsection (1) of this section, which ~~[that]~~ shows that a  
8 proposed new major stationary source or major modification may have an adverse  
9 impact on visibility in a Class I area.

10 (b) If the cabinet finds the ~~[that]~~ analysis does not demonstrate to the  
11 cabinet's satisfaction ~~[of the cabinet]~~ that an adverse impact on visibility will result in  
12 the Class I area, the cabinet shall, in the public notice required in 401 KAR 52:100,  
13 either explain that decision or give notice as to where the explanation may be obtained  
14 ~~[can be explained]~~.

15 (4) Denial; impact on air quality related values. (a) The federal land  
16 manager of lands located in a Class I area may demonstrate to the cabinet that the  
17 emissions from a proposed source or modification will have an adverse impact on the  
18 visibility and other air quality related values ~~[(including visibility)]~~ of those lands, even  
19 though ~~[notwithstanding that]~~ the change in air quality resulting from emissions from the  
20 proposed source or modification will not cause or contribute to concentrations that will  
21 ~~[which would]~~ exceed the maximum allowable increases for a Class I area ~~[as defined~~  
22 ~~in Section 23 of this administrative regulation]~~.

23 (b) If the cabinet concurs with the demonstration specified in paragraph (a) of

1 this subsection, [then] the cabinet shall not issue the permit or permit revision.

2 (5) Class I variances. (a) The owner or operator of a proposed source or  
3 modification may demonstrate to the federal land manager that the emissions from the  
4 source or modification will have no adverse impact on the visibility or other air quality  
5 related values of lands located in a Class I area ~~[(including visibility)]~~, even though  
6 ~~[notwithstanding that]~~ the change in air quality resulting from emissions from the source  
7 or modification will cause or contribute to concentrations that will ~~[which would]~~ exceed  
8 the maximum allowable increases for a Class I area as specified in Section 2(1) of this  
9 administrative regulation.

10 (b) If the federal land manager concurs with the demonstration specified in  
11 paragraph (a) of this subsection and he so certifies, the cabinet may, if the other  
12 applicable requirements of this administrative regulation are met, issue the permit or  
13 permit revision with ~~[the]~~ emissions ~~[emission]~~ limitations that are necessary to assure  
14 that emissions of sulfur dioxide, particulate matter, and nitrogen oxides will not exceed  
15 the maximum allowable increases over minor source baseline concentration for the  
16 pollutants as specified as specified in Section 2(1) of this administrative regulation. ~~[in~~  
17 ~~Section 25 of this administrative regulation.]~~

18 (6) Sulfur dioxide variance by governor with federal land manager's  
19 concurrence.

20 (a) The owner or operator of a proposed source or modification, which cannot  
21 be approved under subsection (5) of this section because the source cannot be  
22 constructed without exceeding a maximum allowable increase in sulfur dioxide  
23 applicable to a Class I area for a period of twenty-four (24) hours or less, may

1 demonstrate to the Governor of the Commonwealth of Kentucky that a variance [~~under~~  
2 ~~this clause~~] will not adversely affect the visibility or other air quality related values of  
3 the area [~~(including visibility)~~].

4 (b) The governor, after consideration of the federal land manager's  
5 recommendation, [~~(if applicable)~~], and subject to his concurrence, may, after notice  
6 and public hearing, grant a variance from the maximum allowable increase.

7 (c) If a variance is granted, the cabinet shall issue a permit or permit revision  
8 to the source or modification under the requirements of 401 KAR Chapter 52  
9 [~~subsection (8) of this section~~], if the other applicable requirements of this  
10 administrative regulation are met.

11 (7) Variance by the governor with the President's concurrence.

12 (a) If the Governor of the Commonwealth of Kentucky recommends a  
13 variance in which the federal land manager does not concur, the recommendations of  
14 the governor and the federal land manager shall be transmitted to the President of the  
15 United States of America.

16 (b) If the variance is approved by the President, the cabinet shall issue a  
17 permit or permit revision in accordance with [~~pursuant to~~] the requirements of 401 KAR  
18 Chapter 52 [~~subsection (8) of this section~~], if the other applicable requirements of this  
19 administrative regulation are met.

20 (8) Emissions [~~emission~~] limitations for presidential or gubernatorial variance.  
21 For a permit or permit revision issued pursuant to subsections (6) or (7) of this section  
22 the source or modification shall comply with the emissions [~~these emission~~] limitations  
23 necessary to assure that:



(a) Emissions of sulfur dioxide from the source or modification shall ~~[will]~~ not, ~~[(during a day on which the other applicable maximum allowable increases are exceeded, )]~~ cause or contribute to concentrations that ~~[which]~~ will exceed the maximum allowable increases over the baseline concentration as specified in the following table; ~~[Section 26 of this administrative regulation]~~ and

<u>Maximum Allowable Increase</u> <u>(Micrograms per cubic meter)</u>		
	<u>Terrain areas</u>	
<u>Period of Exposure</u>	<u>Low</u>	<u>High</u>
<u>24-hour maximum</u>	<u>36</u>	<u>62</u>
<u>3-hour maximum</u>	<u>130</u>	<u>221</u>

(b) ~~[to assure that the]~~ Emissions shall ~~[will]~~ not cause or contribute to concentrations that ~~[which]~~ exceed ~~[the]~~ other applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than a total of eighteen (18) days~~;~~ which are not necessarily consecutive~~;~~ during an annual period.

**Section 15 [46]. Public Participation.** The cabinet shall follow the applicable procedures of 401 KAR 52:100, ~~[and]~~ 40 C.F.R. ~~[CFR]~~ 51.166(q) and this administrative regulation in processing applications under this administrative regulation.

**Section 16 [47]. Source Obligation.** (1) An owner or operator of a source or modification subject to this administrative regulation who begins actual construction after September 22, 1982, shall construct and operate the source or modification in accordance with the application submitted to the cabinet under this administrative

~~regulation and 401 KAR 52:020 or under the terms of an approval to construct [who constructs or operates a source or modification not in accordance with the application submitted to the cabinet under this administrative regulation or under the terms of an approval to construct; or an owner or operator of a source or modification subject to this administrative regulation who begins actual construction after September 22, 1982, without applying for and receiving approval, shall be subject to appropriate enforcement action].~~

(2)(a) Approval to construct shall become invalid if construction:

1. Is not commenced within eighteen (18) months after receipt of the approval; ~~[, if construction]~~

2. Is discontinued for a period of eighteen (18) months or more; or ~~[, or if construction]~~

3. Is not completed within a reasonable time.

(b) The cabinet may extend the eighteen (18) month period upon a satisfactory showing that an extension is justified.

1. An extension ~~[This provision]~~ shall not apply to the time period between construction of the approved phases of a phased construction project; and

2. Each phase shall commence construction within eighteen (18) months of the projected and approved commencement date.

(3) Approval to construct shall not relieve an owner or operator of the responsibility to comply fully with 401 KAR Chapters 50 to 68 ~~[63,]~~ and other requirements of local, state, or federal law.

(4) If ~~[When]~~ a particular source or modification becomes a major stationary

1 source or major modification solely by virtue of a relaxation in an enforceable limitation  
2 that [which] was established after August 7, 1980, on the capacity of the source or  
3 modification to emit a pollutant, [~~such as a restriction on hours of operation, then~~]  
4 Sections 8 to 16 [~~9 to 18~~] of this administrative regulation shall apply to the source or  
5 modification as though construction had not yet commenced on the source or  
6 modification.

7 (5)(a) The provisions of this subsection shall apply to projects at existing  
8 emissions units at a major stationary source other than projects at a Clean Unit or at a  
9 source with a PAL, if:

10 1. There is a reasonable possibility that a project that is not part of a major  
11 modification may result in a significant emissions increase; and

12 2. The owner or operator elects to use the method specified in 401 KAR  
13 51:001, Section 1(202)(b) to calculate projected actual emissions.

14 (b) Before beginning actual construction of a project specified in paragraph  
15 (a) of this subsection, the owner or operator shall document and maintain a record of  
16 the following information:

17 1. A description of the project;

18 2. Identification of the emissions units for which emissions of a regulated  
19 NSR pollutant could be affected by the project; and

20 3. A description of the applicability test used to determine that the project is  
21 not a major modification for any regulated NSR pollutant, including:

22 a. Baseline actual emissions;

23 b. Projected actual emissions;

1        c.     Amount of emissions excluded in calculating projected actual emissions  
2 and an explanation for why that amount was excluded; and

3        d.     Any applicable netting calculations.

4        (c)     For a project specified in paragraph (a) of this subsection, the owner or  
5 operator shall:

6           1.     Monitor the emissions of any regulated NSR pollutant that could increase  
7 as a result of the project and that are emitted by any emissions unit identified in  
8 paragraph (b)2 of this subsection; and

9           2.     Calculate and maintain a record of the annual emissions, in tons per year  
10 on a calendar year basis for:

11          a.     Five (5) years following resumption of regular operations after the  
12 change; or

13          b.     Ten (10) years following resumption of regular operations after the  
14 change if the project increases the design capacity or potential to emit of the regulated  
15 NSR pollutant at the emissions unit.

16          (d)1.   If the emissions unit is an existing EUSGU, before beginning actual  
17 construction, the owner or operator:

18           a.     Shall provide a copy of the information in paragraph (b) of this subsection  
19 to the cabinet; but

20           b.     Shall not be required to obtain a determination from the cabinet before  
21 beginning actual construction.

22           2.     Shall submit a report to the cabinet within sixty (60) days after the end of  
23 each year during which records are required to be generated under paragraph (b) of

this subsection that set out the unit's annual emissions during the calendar year that preceded submission of the report.

(e)1. For an existing unit other than an EUSGU, the owner or operator shall submit a report to the cabinet if:

a. The annual emissions, in tons per year, from a project identified in paragraph (a) of this subsection exceeds the baseline actual emissions, as documented and maintained pursuant to paragraph (b)3 of this subsection, by a significant amount for that regulated NSR pollutant; and

b. The emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (b)3 of this subsection.

2. The report shall be submitted within sixty (60) days after the end of the year during which records are required to be generated under paragraph (b) of this subsection and shall contain the following:

a. The name, address and telephone number of the major stationary source;

b. The annual emissions as calculated pursuant to paragraph (c) of this subsection; and

c. Any other information that the owner or operator wishes to include in the report.

(f) The owner or operator of the source shall make the information required to be documented and maintained under to this subsection available for review upon request for inspection by the cabinet or the general public pursuant to 401 KAR 52:100.

**Section 17 [48]. Environmental Impact Statements.** If a proposed source or modification is subject to action by a federal agency which might necessitate

1 preparation of an environmental impact statement under [~~pursuant to~~] 42 U.S.C. [~~USC~~]  
2 4321 to 4370d (the National Environmental Policy Act), review by the cabinet  
3 conducted in accordance with [~~pursuant to~~] this administrative regulation shall be  
4 coordinated with the broad environmental reviews under that Act and under 42 U.S.C.  
5 [~~USC~~] 7609 [~~(Section 309 of the Clean Air Act),~~] to the maximum extent feasible and  
6 reasonable.

7 **Section 18 [~~19~~]. Innovative Control Technology.** (1) An owner or operator  
8 of a proposed major stationary source or major modification may request the cabinet in  
9 writing to approve a system of innovative control technology.

10 (2) The cabinet may [~~shall~~], with the consent of the governors of other  
11 affected states, determine that the source or modification may employ a system of  
12 innovative control technology if:

13 (a) The proposed control system will not cause or contribute to an  
14 unreasonable risk to public health, welfare, or safety in its operation or function;

15 (b) The owner or operator agrees to achieve a level of continuous emissions  
16 reduction equivalent to that which would have been required under Section 8(2) [~~9(2)~~]  
17 of this administrative regulation by a date specified by the cabinet. The date shall not  
18 be later than four (4) years from the time of start-up or seven (7) years from permit  
19 issuance; [-]

20 (c) The source or modification will meet requirements equivalent to those in  
21 Sections 8 and 9 [~~9 and 10~~] of this administrative regulation based on the emissions  
22 rate that the stationary source employing the system of innovative control technology  
23 will be required to meet on the date specified by the cabinet;

(d) The source or modification will not before the date specified by the cabinet:

1. Cause or contribute to a violation of an applicable national ambient air quality standard; or

2. Impact an area in which ~~[where]~~ an applicable increment is known to be violated;

(e) Section 14 ~~[15]~~ of this administrative regulation ~~[{]~~relating to Class I areas~~}]~~ has been satisfied for all periods during the life of the source or modification; and

(f) All other applicable requirements including those for public participation have been met.

(3) The cabinet shall withdraw approval to employ a system of innovative control technology if:

(a) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate;

(b) The proposed system fails before the specified date and contributes ~~[se as to contribute]~~ to an unreasonable risk to public health, welfare, or safety; or

(c) The cabinet decides that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

(4) If a source or modification fails to meet the required level of continuous emissions ~~[emission]~~ reduction within the specified time period or the approval is withdrawn in accordance with subsection (3) of this section, the cabinet may allow the source or modification up to an additional three (3) years to meet the requirement for

1 the application of BACT [~~best available control technology~~] through use of a  
2 demonstrated system of control.

3 **Section 19 [20]. Permit Condition Rescission.** (1)(a) An owner or operator  
4 holding a permit for a stationary source or modification which contains conditions  
5 pursuant to 401 KAR 51:015 or 401 KAR 51:016E may request that the cabinet rescind  
6 the applicable conditions.

7 (b) An owner or operator of a stationary source or modification who holds a  
8 permit for the source or modification which was issued under this administrative  
9 regulation as in effect on July 30, 1987, or an earlier version of this administrative  
10 regulation, may request that the cabinet rescind the permit or a particular portion of the  
11 permit.

12 (2) The cabinet shall rescind a permit condition if requested and if the  
13 applicant ~~can~~ demonstrates to the satisfaction of the cabinet that this administrative  
14 regulation does not apply to the source or modification or to a portion of the source or  
15 modification.

16 **Section 20. Clean Unit Test for Emissions Units that are Subject to BACT**  
17 **or LAER.** For any emissions unit that is subject to BACT or LAER and for which the  
18 cabinet has issued a major NSR permit in the past ten (10) years, an owner or operator  
19 of a major stationary source may use the Clean Unit test provisions specified in this  
20 section to determine if an emissions increase at a Clean Unit is part of a project that is  
21 a major modification.

22 (1) General Provisions for Clean Units.

23 (a) The cabinet shall make a separate Clean Unit designation for each



pollutant emitted by an emissions unit for which the emissions unit qualifies as a Clean Unit.

(b) A project for which the owner or operator begins actual construction shall be considered to have occurred while the emissions unit is a Clean Unit, if actual construction begins:

1. After the effective date of the Clean Unit designation as determined pursuant to subsection (3) of this section; and

2. Before the expiration date of the Clean Unit designation as determined pursuant to subsection (4) of this section.

(c) For an emissions unit to retain its Clean Unit designation during a project at a Clean Unit, the project shall not:

1. Cause the need for a change in the emissions limitations or work practice requirements adopted in conjunction with BACT in the permit for the unit; or

2. Alter any physical or operational characteristics that formed the basis for the BACT determination as specified in subsection (5)(d) of this section.

(d) Unless an emissions unit re-qualifies as a Clean Unit according to subsection (2)(b) of this section, the unit shall lose its designation as a Clean Unit upon issuance of the necessary permit revisions, if:

1. The project causes the need for a change in the emissions limitations or work practice requirements that were determined in conjunction with BACT in the permit for the unit; or

2. The project will alter any physical or operational characteristics that formed the basis for the BACT determination as specified in subsection (5)(d) of this

1 section.

2 (e) Clean Unit designation shall end immediately prior to the time actual  
3 construction begins on a project that will cause a unit to lose its Clean Unit designation  
4 if the owner or operator begins actual construction on a project before applying for a  
5 permit revision.

6 (f) A project that causes an emissions unit to lose its Clean Unit designation  
7 shall be subject to the applicability requirements of Section 1(4)(a)1,2,and 4 and (4)(b)  
8 of this administrative regulation as if the emissions unit is not a Clean Unit.

9 (2) Qualifying or re-qualifying to use the Clean Unit applicability test.

10 (a) An emissions unit shall automatically qualify as a Clean Unit if the unit  
11 meets the requirements in this paragraph.

12 1. Permitting requirement. The owner or operator of an emissions unit shall  
13 have received a major NSR permit within the past ten (10) years and shall maintain and  
14 provide information upon request by the cabinet or U.S. EPA to demonstrate that this  
15 permitting requirement is met.

16 2. Qualifying air pollution control technologies requirement. Air pollution  
17 emissions from the emissions unit shall be reduced through the use of air pollution  
18 control technology, including pollution prevention or work practices, that meets the  
19 following requirements:

20 a. The control technology shall achieve the BACT or LAER level of  
21 emissions reductions determined by issuance of a major NSR permit within the past ten  
22 (10) years;

23 b. The emissions unit shall not be eligible for the Clean Unit designation if

the BACT determination did not result in a requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type; and

c. The owner or operator shall make an investment to install the control technology. An investment shall include expenses to research the application of or to actually apply a pollution prevention technique to the emissions unit.

(b) Re-qualifying for the Clean Unit designation. After the original Clean Unit designation expires or is lost, an emissions unit may re-qualify as a Clean Unit under the provisions of this paragraph or under Section 21 of this administrative regulation.

1. For an emissions unit that is re-qualifying for Clean Unit designation, an owner or operator shall obtain a new major NSR permit or permit revision, as applicable, issued pursuant to 401 KAR 52:020.

2. The permit shall require compliance with the current-day BACT or LAER, and the emissions unit shall meet the requirements in subsection (3)(a) of this section.

(3) Effective date of the Clean Unit designation. The date that the owner or operator may begin to use the Clean Unit test to determine if a project involving an emissions unit is a major modification shall be determined according to paragraph (a) or (b) of this subsection, as applicable.

(a) The effective date for an original Clean Unit designation and for an emissions unit that re-qualifies as a Clean Unit by implementing a new control technology to meet current-day BACT shall be:

1. The earlier of the date the emissions unit's air pollution control technology is placed into service or three (3) years after the date the major NSR permit or permit revision is issued; and

1           2. No sooner than the date that provisions for Clean Units become effective  
2 in the Kentucky SIP.

3           (b) The effective date for emissions units that re-qualify for the Clean Unit  
4 designation using an existing control technology shall be the date the new major NSR  
5 permit or permit revision is issued.

6           (4) Clean Unit expiration. The date the owner or operator shall no longer be  
7 allowed to use the Clean Unit test to determine if a project involving an emissions unit  
8 is, or is part of, a major modification shall be determined according to paragraph (a) or  
9 (b) of this subsection, as applicable.

10          (a) For an emissions unit that automatically qualifies as a Clean Unit under  
11 subsection (2)(a) of this section or a unit that re-qualifies by implementing new control  
12 technology to meet current-day BACT, the expiration date of the Clean Unit designation  
13 shall be:

14           1. Ten (10) years after the effective date or ten (10) years after the date the  
15 equipment went into service, whichever is earlier; or

16           2. At any time the owner or operator fails to comply with the provisions for  
17 maintaining the Clean Unit designation pursuant to subsection (6) of this section.

18          (b) The Clean Unit designation for an emissions unit that re-qualifies for the  
19 Clean Unit designation using an existing control technology shall expire:

20           1. Ten (10) years after the effective date; or

21           2. At any time the owner or operator fails to comply with the provisions for  
22 maintaining the Clean Unit designation according to subsection (6) of this section.

23          (5) Required Title V permit content for a Clean Unit. The Title V permit for a

major stationary source with a Clean Unit shall, after the effective date of the Clean Unit designation and in accordance with the applicable provisions of 401 KAR Chapter 52, but not later than the date the Title V permit is renewed, include the following terms and conditions:

(a) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant for which this Clean Unit designation applies.

(b) The effective date of the Clean Unit designation.

1. If the exact effective date is not known on the date the Clean Unit designation is initially recorded in the Title V permit, the permit or permit revision shall describe the event that shall determine the effective date. Once the effective date is determined, the owner or operator shall notify the cabinet of the exact date; and

2. If originally absent from the Title V permit, the effective date of the Clean Unit shall be added to the Title V permit at the first opportunity for any reason the permit is opened, but not later than the next renewal.

(c) The expiration date of the Clean Unit designation.

1. If the exact expiration date is not known at the date the Clean Unit designation is initially recorded into the Title V permit, the permit shall describe the event that shall determine the expiration date;

2. Once the expiration date is determined, the owner or operator shall notify the cabinet of the exact date; and

3. If originally absent for the Title V permit, the expiration date shall be added to the Title V permit at the first opportunity for any reason the permit is opened, but not later than the next renewal.

1        (d) All emissions limitations and work practice requirements adopted in  
2 conjunction with BACT and any physical or operational characteristics that formed the  
3 basis for the BACT determination.

4        (e) Monitoring, recordkeeping, and reporting requirements as necessary to  
5 demonstrate that the emissions unit continues to meet the criteria for maintaining the  
6 Clean Unit designation pursuant to subsection (6) of this section.

7        (f) Terms reflecting the owner or operator's duty to maintain the Clean Unit  
8 designation and the consequences of failing to do so, pursuant to subsection (6) of this  
9 section.

10       (6) Maintaining the Clean Unit designation.

11       (a) The owner or operator of a Clean Unit shall conform to the provisions of  
12 this subsection to maintain the Clean Unit designation.

13       1. The Clean Unit shall comply with the emissions limitations or work  
14 practice requirements adopted in conjunction with the BACT that are recorded in the  
15 major NSR permit or permit revision and subsequently reflected in the Title V permit;

16       2. The owner or operator shall not make a physical change in or change in  
17 the method of operation of the Clean Unit that causes the emissions unit to function in  
18 a manner that is inconsistent with the physical or operational characteristics that  
19 formed the basis for the BACT determination;

20       3. The Clean Unit shall comply with all terms and conditions in the Title V  
21 permit related to the unit's Clean Unit designation; and

22       4. The Clean Unit shall continue to control emissions using the specific air  
23 pollution control technology that is the basis for its Clean Unit designation. The Clean

1 Unit designation shall end if the emissions unit or control technology is replaced.

2 (b) The requirements of this subsection shall apply to each pollutant for  
3 which the cabinet has designated an emissions unit a Clean Unit. Failing to conform to  
4 the restrictions for one pollutant shall only affect the Clean Unit designation for that  
5 pollutant.

6 (7) Netting at Clean Units.

7 (a) Emissions changes that occur at a Clean Unit shall not be included in  
8 calculating a significant net emissions increase to be used in a netting analysis unless:

9 1. Such use occurs before the effective date of the Clean Unit designation,  
10 or after the Clean Unit designation expires; or,

11 2. The emissions unit reduces emissions below the level that qualified the  
12 unit as a Clean Unit.

13 (b) The owner or operator may generate a credit for the difference between  
14 the level that qualified the unit as a Clean Unit and the new emissions limitation if:

15 1. The unit reduces emissions below the level that qualified the unit as a  
16 Clean Unit; and

17 2. The reductions are surplus, quantifiable, and permanent.

18 (c) For generating offsets, reductions shall also be federally enforceable.

19 (d) For determining creditable net emissions increases and decreases, the  
20 reductions shall also be enforceable as a practical matter.

21 (8) Effect of area redesignation on Clean Units.

22 (a) The Clean Unit designation of an emissions unit shall not be affected by  
23 redesignation of the attainment status of the area in which it is located.

1        (b) If an existing Clean Unit designation expires or is lost, the unit shall re-  
2 qualify as a Clean Unit according to the requirements currently applicable in the area,  
3 regardless of the area's original attainment status during the previous designation  
4 period.

5        **Section 21. Clean Unit Provisions for Emissions Units that Achieve an**  
6 **Emissions Limitation Comparable to BACT.** For an emissions unit at a major  
7 stationary source that does not qualify as a Clean Unit under Section 20 of this  
8 administrative regulation but is achieving a level of emissions control comparable to  
9 BACT, the owner or operator may use the Clean Unit test specified in this section to  
10 determine if an emissions increase at the unit is part of a project that is a major  
11 modification.

12        (1) General provisions for Clean Units.

13        (a) The cabinet shall make a separate Clean Unit designation for each  
14 pollutant emitted by an emissions unit for which the emissions unit qualifies as a Clean  
15 Unit.

16        (b) A project for which the owner or operator begins actual construction shall  
17 be considered to have occurred while the emissions unit is a Clean Unit, if actual  
18 construction begins:

19        1. After the effective date of the Clean Unit designation as determined  
20 pursuant to subsection (4) of this section; and

21        2. Before the expiration date of the Clean Unit designation as determined  
22 pursuant to subsection (5) of this section.

23        (c) For an emissions unit to retain its Clean Unit designation during a project



1 at a Clean Unit, the project shall not:

2       1. Cause the need for a change in the emissions limitations or work practice  
3 requirements in the permit for the unit that have been determined to be comparable to  
4 BACT according to subsection (3) of this section; or

5       2. Alter any physical or operational characteristics that formed the basis for  
6 determining that the emissions unit's control technology achieves a level of emissions  
7 control comparable to BACT according to subsection (7)(d) of this section.

8       (d) Unless an emissions unit re-qualifies as a Clean Unit according to  
9 subsection (2)(b) of this section, the unit shall lose its designation as a Clean Unit upon  
10 issuance of the necessary permit revisions, if:

11       1. The project causes the need for a change in the emissions limitations or  
12 work practice requirements in the permit for the unit that have been determined to be  
13 comparable to BACT; or

14       2. The project will alter any physical or operational characteristics that  
15 formed the basis for determining that the emissions unit's control technology achieves  
16 a level of emissions control comparable to BACT.

17       (e) Clean Unit designation shall end immediately prior to the time actual  
18 construction begins on a project that will cause a unit to lose its Clean Unit designation,  
19 if the owner or operator begins actual construction on a project before applying for a  
20 permit revision.

21       (f) A project that causes an emissions unit to lose its Clean Unit designation  
22 shall be subject to the applicability requirements of Section 1(4)(a)1,2, and 4 and (4)(b)  
23 of this administrative regulation as if the emissions unit is not a Clean Unit.

1        (2)    Qualifying or re-qualifying to use the Clean Unit applicability test.

2        (a)    An emissions unit shall qualify as a Clean Unit if the unit meets the  
3 requirements in this paragraph.

4        1.    Qualifying air pollution control technology requirement. Air pollutant  
5 emissions from an emissions unit shall be reduced through the use of air pollution  
6 control technology, including pollution prevention or work practices, and the owner or  
7 operator shall:

8        a.    Demonstrate that an emissions unit's control technology is comparable to  
9 BACT according to the requirements of subsection (3) of this section;

10       b.    Demonstrate that an emissions unit's control technology reduces  
11 emissions below the level of a standard, uncontrolled emissions unit of the same type;  
12 and

13       c.    Make an investment to install the control technology. An investment shall  
14 include expenses to research the application of, or to actually apply, a pollution  
15 prevention technique to the emissions unit.

16       2.    Impact of emissions from the unit requirement. The allowable emissions  
17 from the emissions unit, as determined by the cabinet, shall not:

18       a.    Cause or contribute to a violation of any national ambient air quality  
19 standard or PSD increment; or

20       b.    Adversely impact visibility or another air quality related value that has  
21 been identified as a federal Class I area by a federal land manager and for which  
22 information is available to the general public.

23       3.    Date of installation requirement.

1        a. For control technology installed before provisions for Clean Units are  
2 effective in the Kentucky SIP, the owner or operator of an emissions unit with control  
3 technology on which a Clean Unit designation is based, shall apply for Clean Unit  
4 designation within two (2) years after the requirements for Clean Units become  
5 effective in the Kentucky SIP.

6        b. For control technology installed after the provisions for Clean Units  
7 become effective in the Kentucky SIP, the owner or operator shall apply for Clean Unit  
8 designation at the time the control technology is installed.

9        (b) Re-qualifying as a Clean Unit. An emissions unit may re-qualify as a  
10 Clean Unit after the original Clean Unit designation expires or is lost according to  
11 provisions in subsections (6) and (7) of this section or under Clean Unit provisions in  
12 Section 20 of this administrative regulation.

13        1. The owner or operator shall obtain a new permit or permit revision  
14 pursuant to subsections (6) and (7) of this section and 401 KAR 52:020 that  
15 demonstrates the emissions unit's control technology is achieving a level of emissions  
16 control comparable to current-day BACT.

17        2. The emissions unit shall meet the requirements of subsections (2)(a)1  
18 and 2 of this section.

19        (3) Demonstrating control effectiveness comparable to BACT. The owner or  
20 operator shall demonstrate that the emissions unit's control technology is comparable  
21 to BACT under the provisions of either paragraph (a) or (b) of this subsection.

22        (a) Comparison of the control technology to previous BACT and LAER  
23 determinations.

1        1. An emissions unit's control technology shall be presumed to be  
2 comparable to BACT if:

3        a. The control technology achieves an emissions limitation that is equal to or  
4 better than the average of the emissions limitation achieved by all the sources for which  
5 a BACT or LAER determination has been made within the preceding 5 years and  
6 entered into the RACT/BACT/LAER Clearinghouse; and

7        b. Application of the BACT or LAER control technology to the emissions unit  
8 is technically feasible.

9        2. The cabinet shall consider any information on achieved-in-practice  
10 pollution control technologies provided during the public comment period:

11        a. To determine the accuracy of any presumptive determination that the  
12 control technology is comparable to BACT; and

13        b. To consider any additional BACT or LAER determinations of which the  
14 cabinet is aware.

15        (b) The substantially-as-effective test. The owner or operator may  
16 demonstrate that the emissions unit's control technology is substantially as effective as  
17 BACT pursuant to this paragraph. The cabinet:

18        1. Shall consider the evidence on a case-by-case basis that an owner or  
19 operator, and any other person during the public participation process, provides to the  
20 cabinet to demonstrate if the emissions unit's control technology is substantially as  
21 effective as BACT; and

22        2. Shall determine if the emissions unit's air pollution control technology is  
23 substantially as effective as BACT after considering the evidence.

1       (c)    Time of comparison.

2       1.    Emissions units with control technologies installed before provisions for  
3 Clean Units are effective in the Kentucky SIP. The owner or operator of an emissions  
4 unit for which control technology is installed before the provisions regarding Clean  
5 Units are effective in the Kentucky SIP shall demonstrate to the cabinet that the  
6 emissions limitation achieved by the emissions unit's control technology is comparable  
7 to:

8       a.    The BACT requirements that applied at the time the control technology  
9 was installed; or

10      b.    The current-day BACT requirements.

11      2.    Emissions units with control technologies installed after provisions for  
12 Clean Units are effective in the Kentucky SIP. The owner or operator of an emissions  
13 unit for which control technology is installed after the provisions regarding Clean Units  
14 are effective in the Kentucky SIP shall demonstrate to the cabinet that the emissions  
15 limitation achieved by the emissions unit's control technology is comparable to current-  
16 day BACT requirements.

17      (4)   Effective date of the Clean Unit designation. The date that the owner or  
18 operator may begin to use the Clean Unit test to determine if a project involving an  
19 emissions unit is a major modification shall be the later of:

20      (a)   The date that the permit or permit revision required by subsection (6) of  
21 this section is issued; or

22      (b)   The date that the emissions unit's air pollution control technology is  
23 placed into service.

1       (5) Clean Unit expiration. The date the owner or operator shall no longer be  
2 allowed to use the Clean Unit test to determine if a project involving an emissions unit  
3 is, or is part of, a major modification shall be determined according to this subsection.

4       (a) For an emissions unit with a Clean Unit designation based on a  
5 demonstration by the owner or operator that the emissions unit's control technology is  
6 comparable to the BACT requirements that applied at the time the control technology  
7 was installed, the Clean Unit designation shall expire ten (10) years from the date the  
8 unit's control technology was installed.

9       (b) For all other emissions units, the Clean Unit designation shall expire ten  
10 (10) years from the effective date of the Clean Unit designation.

11       (c) The Clean Unit designation shall expire at any time the owner or operator  
12 fails to comply with the provisions for maintaining the Clean Unit designation according  
13 to subsection (8) of this section.

14       (6) Procedures for designating emissions units as Clean Units.

15       (a) The cabinet shall designate an emissions unit a Clean Unit by issuing a  
16 permit or permit revision under 401 KAR Chapter 52, including requirements for public  
17 notice of the proposed Clean Unit designation and opportunity for public comment; and

18       (b) The permit or permit revision shall meet the requirements of subsection  
19 (7) of this section.

20       (7) Required permit content. The Title V permit for a major stationary source  
21 with a Clean Unit shall, after the effective date of the Clean Unit designation and in  
22 accordance with the applicable provisions of 401 KAR Chapter 52, but not later than  
23 the date the Title V permit is renewed, include the following terms and conditions:

1        (a) A statement indicating that the emissions unit qualifies as a Clean Unit  
2 and identifying the pollutant for which the Clean Unit designation applies;

3        (b) The effective date of Clean Unit designation.

4        1. If the effective date is not known on the date the Clean Unit designation  
5 is initially recorded in the Title V permit, the permit or permit revisions shall describe  
6 the event that shall determine the effective date. Once the effective date is determined,  
7 the owner or operator shall notify the cabinet of the exact date; and

8        2. If originally absent from the Title V permit, the effective date of the Clean  
9 Unit shall be added to the Title V permit at the first opportunity the permit is opened,  
10 but not later than the next renewal;

11       (c) The expiration date of Clean Unit designation:

12       1. If the expiration date is not known on the date the Clean Unit designation  
13 is initially recorded in the Title V permit, the permit or permit revision shall describe the  
14 event that shall determine the expiration date;

15       2. Once the expiration date is determined, the owner or operator shall notify  
16 the cabinet of the exact date; and

17       3. If originally absent from the Title V permit, the expiration date shall be  
18 added to the Title V permit at the first opportunity the permit is opened, but not later  
19 than the next renewal;

20       (d) All emissions limitations and work practice requirements adopted in  
21 conjunction with emissions limitations necessary to assure the control technology  
22 continues to achieve an emissions limitation comparable to BACT and any physical or  
23 operational characteristics that formed the basis for determining that the emissions

1 unit's control technology achieves a level of emissions control comparable to BACT;

2 (e) Monitoring, recordkeeping, and reporting requirements as necessary to  
3 demonstrate that the emissions unit continues to meet the criteria for maintaining the  
4 Clean Unit designation pursuant to subsection (8) of this section; and

5 (f) Terms reflecting the owner or operator's duty to maintain the Clean Unit  
6 designation and the consequences of failing to do so, pursuant to subsection (8) of this  
7 section.

8 (8) Maintaining the Clean Unit designation.

9 (a) The owner or operator shall conform to the provisions of this subsection  
10 to maintain Clean Unit status.

11 1. To ensure that the control technology continues to achieve emissions  
12 control comparable to BACT, the Clean Unit shall comply with the emissions limitations  
13 or work practice requirements adopted in conjunction with those that are comparable to  
14 BACT, which are recorded in the source's major NSR permit or permit revisions and  
15 subsequently reflected in the Title V permit that designates the unit as a Clean Unit.

16 2. The owner or operator shall not make a physical change in or change in  
17 the method of operation of the Clean Unit that causes the emissions unit to function in  
18 a manner that is inconsistent with the physical or operational characteristics that  
19 formed the basis for the determination that the control technology is achieving a level of  
20 emissions control that is comparable to BACT.

21 3. The Clean Unit shall comply with all terms and conditions in the Title V  
22 permit related to the unit's Clean Unit designation.

23 4. The Clean Unit shall continue to control emissions using the specific air



pollution control technology that was the basis for its Clean Unit designation. The Clean Unit designation shall end if the emissions unit or control technology is replaced.

(b) These requirements of this subsection shall apply to each pollutant for which the cabinet has designated an emissions unit a Clean Unit. Failing to conform to the restrictions for one pollutant shall only affect the Clean Unit designation for that pollutant.

(9) Netting at Clean Units.

(a) Emissions changes that occur at a Clean Unit shall not be included in calculating a significant net emissions increase to be used in a netting analysis, unless:

1. Such use occurs before the date the Clean Unit provisions are effective in the Kentucky SIP or after the Clean Unit designation expires; or,

2. The emissions unit reduces emissions below the level that qualified the unit as a Clean Unit.

(b) The owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emissions limitation, if:

1. The unit reduces emissions below the level that qualified the unit as a Clean Unit; and

2. The reductions are surplus, quantifiable, and permanent.

(c) For generating offsets, reductions shall also be federally enforceable.

(d) For determining creditable net emissions increases and decreases, the reductions shall also be enforceable as a practical matter.

(10) Effect of area redesignation on Clean Units.

(a) The Clean Unit designation of an emissions unit shall not be affected by

redesignation of the attainment status of the area in which it is located.

(b) If an existing Clean Unit designation expires or is lost, the unit shall re-qualify as a Clean Unit according to the requirements that are currently applicable in the area, regardless of the area's original attainment status during the previous designation period. ~~[Reference Material (1) Incorporation by Reference. The following documents are incorporated by reference:~~

~~(a)1. Standard Industrial Classification Manual, 1987, published by the Office of Management and Budget.~~

~~2. The manual is available under Order No. PB 87-100012 from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia, 22161; Phone (703) 487-4650.~~

~~(b)1. Documents from the Code of Federal Regulations:~~

~~a. 40 CFR Part 51, Appendix W: Guideline on Air Quality Models (Revised), (July, 1986), with Supplement A (July, 1987), Supplement B (July, 1993), and Supplement C (August, 1995), as published in the Code of Federal Regulations, July 1, 1995, and as amended by 60 FR 40465 (August 9, 1995).~~

~~b. 40 CFR Part 58, Appendix B: Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring, as published in the Code of Federal Regulations, July 1, 1995, and as amended by 60 FR 52315 (October 6, 1995).~~

~~2. Copies of the Code of Federal Regulations and the Federal Register may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Attn.: New Orders, P.O. Box 371954, Pittsburgh PA 15250-7954; Phone (202) 512-~~

1 1800; FAX (202) 512-2250.

2 ~~(2) — The documents incorporated by reference in subsection (1) of this section~~  
3 ~~are available for public inspection and copying (subject to copyright law) at the~~  
4 ~~following main and regional offices of the Kentucky Division for Air Quality during the~~  
5 ~~normal working hours of 8 a.m. to 4:30 p.m., local time:~~

6 ~~(a) — Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky~~  
7 ~~40601-1403, (502) 573-3382;~~

8 ~~(b) — Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky~~  
9 ~~41105-1507, (606) 920-2067;~~

10 ~~(c) — Bowling Green Regional Office, 1508 Western Avenue, Bowling Green,~~  
11 ~~Kentucky 42104, (270) 746-7475;~~

12 ~~(d) — Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110,~~  
13 ~~Florence, Kentucky 41042, (859) 525-4923;~~

14 ~~(e) — Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky~~  
15 ~~41701, (606) 435-6022;~~

16 ~~(f) — London Regional Office, 875 S. Main Street, London, Kentucky 40741,~~  
17 ~~(606) 878-0157;~~

18 ~~(g) — Owensboro Regional Office, 3032 Alvey Park Drive W., Suite 700,~~  
19 ~~Owensboro, Kentucky 42303, (270) 687-7304; and~~

20 ~~(h) — Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky~~  
21 ~~42003, (270) 898-8468.]~~

22 **Section 22. PCP Exclusion Procedural Requirements.** For a project to  
23 qualify for a pollution control project (PCP) exclusion, an owner or operator shall

comply with the provisions of this section.

(1) To request a PCP designation for a project the owner or operator shall:

(a) Submit a notice to the cabinet before beginning actual construction for a project that is listed in the definition for "pollution control project" in 401 KAR 51:001, Section 1(188)(a) to (f); or

(b) Submit an application for a permit or permit revision and obtain approval to use the PCP exclusion from the cabinet according to subsection (5) of this section for a project that is not listed in the definition at 401 KAR 51:001, Section 1(188)(a) to (f).

(2) The owner or operator for all projects that rely on the PCP exclusion shall perform:

(a) An environmentally beneficial analysis.

1. The environmental benefit from the emissions reductions of pollutants regulated under 42 U.S.C. 7401 to 7671q (Clean Air Act) shall outweigh the environmental detriment of emissions increases in pollutants regulated under the Act; and

2. A statement that the project is implementing a technology from those listed in 401 KAR 51:001, Section 1(188)(a) to (f) shall satisfy the requirement in subparagraph 1 of this paragraph.

(b) An air quality analysis. The emissions increases from the project shall not:

1. Cause or contribute to a violation of any national ambient air quality standard or PSD increment; or

1        2. Adversely impact visibility or another air quality related value that has  
2 been identified for a federal Class I area by a federal land manager and for which  
3 information is available to the general public.

4        (3) Content of notice or application for a permit or permit revision. The owner  
5 or operator shall include the following information in the notice or application for a  
6 permit or permit revision submitted to the cabinet for a PCP:

7        (a) A description of the project;

8        (b) The potential emissions increases and decreases of any pollutant  
9 regulated under the Act and the projected emissions increases and decreases using  
10 the methodology in Section 1(4) of this administrative regulation that will result from the  
11 project;

12        (c) A copy of the environmentally beneficial analysis required by subsection  
13 (2)(a) of this section;

14        (d) A description of all methods, including monitoring and recordkeeping, that  
15 shall be used on an ongoing basis to demonstrate that the project is environmentally  
16 beneficial and sufficient to meet the applicable requirements of 401 KAR Chapter 52;

17        (e) A certification that the project shall be designed and operated in a manner  
18 that is consistent with:

19        1. The proper industry and engineering practices;

20        2. The environmentally beneficial analysis and air quality analysis required  
21 by subsection (2)(a) and (b) of this section;

22        3. The information submitted in the notice or permit application; and

23        4. Procedures that minimize emissions of collateral pollutants within the

physical configuration and operational standards usually associated with the emissions control device or strategy; and

(f) Demonstration that the PCP shall not have an adverse air quality impact.

1. The demonstration requirement may be satisfied with modeling, screening level modeling results, a statement that the collateral emissions increase is included within the parameters used in the most recent modeling exercise as required by subsection (2)(b) of this section, or another method approved by the cabinet; and

2. An air quality impact analysis shall not be required for any pollutant that will not experience a significant emissions increase from the project.

(4) Notice process for listed projects. The owner or operator:

(a) May begin actual construction of a PCP project immediately after notice is sent to the cabinet for projects listed in the definition of "pollution control project" in 401 KAR 51:001, Section 1(188)(a) to (f); and

(b) Shall respond to any requests by the cabinet for additional information necessary to evaluate the suitability of the project for a PCP exclusion.

(5) Permitting process for unlisted projects.

(a) The owner or operator shall not begin actual construction of a PCP that is not listed in 401 KAR 51:001, Section 1(188)(a) to (f) until the cabinet approves and issues a permit or permit revision for the project pursuant to 401 KAR 52:020. These procedures shall include the cabinet providing the public with:

1. Notice of the proposed approval;

2. Access to the environmentally beneficial analysis and the air quality analysis; and

1        3. At least a 30-day period for the public and the U.S. EPA to submit  
2 comments.

3        (b) The cabinet shall address all material comments received by the end of  
4 the comment period before taking final action on the permit or permit revision.

5        (6) Operational requirements. Upon installation of a PCP, the owner or  
6 operator shall comply with the requirements of this subsection.

7        (a) General duty. The owner or operator shall operate the PCP in a manner  
8 that is consistent with:

9            1. Proper industry and engineering practices;

10          2. The environmentally beneficial analysis and air quality analysis required  
11 by subsection (2)(a) and (b) of this section;

12          3. Information submitted in the notice or application for a permit or permit  
13 revision required by subsection (3) of this section; and

14          4. Procedures that minimize emissions of collateral pollutants within the  
15 physical configuration and operational standards usually associated with the emissions  
16 control device or strategy.

17        (b) Recordkeeping. To prove that the PCP is operated consistent with the  
18 general duty requirements in paragraph (a) of this subsection, the owner or operator  
19 shall maintain copies on site, of:

20            1. The environmentally beneficial analysis;

21            2. The air quality impacts analysis; and,

22            3. The monitoring and other emissions records.

23        (c) Permit requirements. The owner or operator shall comply with all

provisions in a permit issued under 401 KAR 52:020 related to use and approval of the PCP exclusion.

(d) Generation of emissions reduction credits.

1. Emissions reductions created by a PCP shall not be included in calculating a significant net emissions increase unless the emissions unit further reduces emissions after qualifying for the PCP exclusion;

2. The owner or operator may generate a credit for the difference between the level of reduction that was used to qualify for the PCP exclusion and the new emissions limitation if such reductions are surplus, quantifiable, and permanent;

3. For generating offsets, the reductions shall be federally enforceable; and

4. For determining creditable net emissions increases and decreases, the reductions shall also be enforceable as a practical matter. **[Significant Net Emissions**

**Rates.]**

[POLLUTANT	EMISSIONS RATE
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy of particulate matter emissions
	15 tpy of PM <sub>10</sub> emissions
Ozone	40 tpy of volatile organic compounds
Lead	0.6 tpy
Asbestos	0.007 tpy



Beryllium	0.0004 tpy
Mercury	0.1 tpy
Vinyl chloride	1 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H <sub>2</sub> S)	10 tpy
Total reduced sulfur (including H <sub>2</sub> S)	10 tpy
Reduced sulfur compounds (including H <sub>2</sub> S)	10 tpy
Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.2 x 10 <sup>-6</sup> megagrams per year (Mg/y) (3.5 x 10 <sup>-6</sup> tpy)
Municipal waste combustor metals (measured as particulate matter)	14 Mg/y (15 tpy)
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	36 Mg/y (40 tpy)
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	45 Mg/y (50 tpy)]

**Section 23. Plantwide Applicability Limit Provisions.** The cabinet may approve the use of an actuals PAL (PAL) for an existing major stationary source if the PAL meets the requirements of this section.

(1) General provisions.

(a) An owner or operator may execute a project without triggering major NSR, if the source maintains its total source-wide emissions below the PAL level, meets the requirements in this section, and complies with the PAL permit. If these conditions are met, a project:

1. Shall not be considered a major modification for the PAL pollutant;

1        2.    Shall not have to be approved through Kentucky's major NSR program;  
2 and

3        3.    Shall not be subject to the provisions of Section 16(2) of this  
4 administrative regulation concerning restrictions on relaxing enforceable emission  
5 limitations that a major stationary source used to avoid applicability of the major NSR  
6 program.

7        (b)    Except as provided under subparagraph (1)(a)3 of this section, a major  
8 stationary source shall continue to comply with all applicable federal or state  
9 requirements, emissions limitations, and work practice requirements that were  
10 established prior to the effective date of the PAL.

11        (2)    Permit application requirements. The owner or operator of a major  
12 stationary source shall submit the following information to the cabinet for approval as  
13 part of an application for a permit or permit revision requesting a PAL:

14        (a)    A list of all emissions units at the source designated as small, significant  
15 or major, based on their potential to emit;

16        (b)    Identification of the federal and state applicable requirements, emissions  
17 limitations, and work practice requirements that apply to each emissions unit;

18        (c)    Calculations of the baseline actual emissions for the emissions units with  
19 supporting documentation, including emissions associated with startup, shutdown and  
20 malfunction; and

21        (d)    The calculation procedures the owner or operator proposes to use to  
22 convert the monitoring system data to monthly emissions and annual emissions based  
23 on a twelve (12) month rolling total for each month as required by subsection (12)(a) of

1 this section.

2 (3) Establishing a PAL. The cabinet shall establish a PAL at a major  
3 stationary source in a federally enforceable permit pursuant to the requirements of this  
4 section.

5 (a) The PAL shall impose an annual emissions limitation in tons per year that  
6 is enforceable as a practical matter for the entire major stationary source.

7 1. For each month during the PAL effective period after the first twelve (12)  
8 months of establishing a PAL, the owner or operator shall show that the sum of the  
9 monthly emissions from each emissions unit under the PAL for the previous twelve (12)  
10 consecutive months is less than the PAL as a twelve (12) month average, rolled  
11 monthly; and

12 2. For each month during the first eleven (11) months from the PAL effective  
13 date, the owner or operator shall show that the sum of the preceding monthly emissions  
14 from the PAL effective date for each emissions unit under the PAL is less than the PAL.

15 (b) The PAL shall be established in a PAL permit that:

16 1. Meets the public participation requirements in subsection (4) of this  
17 section; and

18 2. Contains all the requirements of subsection (6) of this section;

19 (c) A PAL shall include fugitive emissions, to the extent quantifiable, from all  
20 emissions units that emit or have the potential to emit the PAL pollutant at the major  
21 stationary source;

22 (d) Each PAL shall regulate emissions of only one pollutant;

23 (e) Each PAL shall have a PAL effective period of ten (10) years;

1        (f) The owner or operator of a major stationary source with a PAL shall  
2 comply with the monitoring, recordkeeping, and reporting requirements of subsections  
3 (11) to (13) of this section for each emissions unit under the PAL through the PAL  
4 effective period;

5        (g) Emissions reductions of a PAL pollutant that occur during the PAL  
6 effective period shall not be creditable as decreases for offsets under 40 C.F.R.  
7 51.165(a)(3)(ii), unless:

8        1. The level of the PAL is reduced by the amount of the emissions  
9 reductions; and

10       2. The reductions will be creditable in the absence of the PAL.

11       (4) Public participation requirements. PALs for existing major stationary  
12 sources shall be established, renewed, or increased pursuant to this subsection and  
13 the applicable procedures of 401 KAR 52:100. The cabinet shall:

14       (a) Provide the public with notice of the proposed approval of a PAL permit  
15 with at least a thirty (30) day period for submittal of public comment; and

16       (b) Address all material comments before taking final action on a PAL permit  
17 or permit revision.

18       (5) Setting the ten (10) year PAL level.

19       (a) The PAL level for a major stationary source shall be the sum of the  
20 baseline actual emissions of the PAL pollutant for each emissions unit at the source  
21 during the chosen twenty-four (24) month period plus the applicable significant level for  
22 the PAL pollutant under the definition for "significant" in 401 KAR 51:001, Section  
23 1(221) or under the Act, whichever is lower.

1       **(b) In establishing a PAL level for a PAL pollutant, only one consecutive**  
2 **twenty-four (24) month period shall be used to determine the baseline actual emissions**  
3 **for all existing emissions units.**

4       **(c) A different consecutive twenty-four (24) month period may be used for**  
5 **each different PAL pollutant.**

6       **(d) Emissions associated with units that were permanently shutdown after the**  
7 **chosen twenty-four (24) month period shall be subtracted from the PAL level.**

8       **(e) The PAL permit shall contain all the requirements of subsection (6) of this**  
9 **section.**

10       **(f) Emissions from units for which actual construction began after the twenty-**  
11 **four (24) month period shall be added to the PAL level in an amount equal to the**  
12 **potential to emit of the units.**

13       **(g) The cabinet shall specify a reduced PAL level in the PAL permit to**  
14 **become effective on the future compliance date of any applicable federal or state**  
15 **regulatory requirement that the cabinet is aware of prior to issuance of the PAL permit.**

16       **(6) Contents of the PAL permit. The PAL permit shall contain the following**  
17 **information:**

18       **(a) The PAL pollutant and the applicable source-wide emissions limitation in**  
19 **tons per year;**

20       **(b) The PAL permit effective date and the expiration date of the PAL or PAL**  
21 **effective period;**

22       **(c) Specification in the PAL permit that if a major stationary source owner or**  
23 **operator applies to renew a PAL under subsection (9) of this section before the end of**

1 the PAL effective period, the PAL shall remain in effect until a revised PAL permit is  
2 issued by the cabinet;

3 (d) A requirement that emissions calculations for compliance purposes  
4 include emissions from startups, shutdowns and malfunctions;

5 (e) A requirement that, once the PAL expires, the major stationary source is  
6 subject to the requirements of subsection (8) of this section;

7 (f) The calculation procedures that the major stationary source owner or  
8 operator shall use to convert the monitoring system data to monthly emissions and  
9 annual emissions based on a twelve (12) month rolling total for each month as required  
10 by subsection (12)(a) of this section;

11 (g) A requirement that the major stationary source owner or operator shall  
12 monitor all emissions units in accordance with the provisions in subsection (12)(a) of  
13 this section;

14 (h) A requirement that the owner or operator shall retain the records required  
15 under subsection (12) of this section on site. Records may be retained in an electronic  
16 format or another acceptable format approved by the cabinet;

17 (i) A requirement for the owner or operator to submit the reports required  
18 under subsection (13) of this section by the required deadlines; and

19 (j) Other requirements necessary to implement and enforce the PAL.

20 (7) PAL effective period and reopening of a PAL permit.

21 (a) A PAL effective period shall be ten (10) years.

22 (b) The cabinet shall reopen a PAL permit to:

23 1. Correct typographical or calculation errors made in setting the PAL;

2. Reflect a more accurate determination of emissions used to establish the PAL;

3. Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under 40 C.F.R. 51.165(a)(3)(ii); or

4. Revise the PAL to reflect an increase in the PAL according to subsection (10) of this section.

(c) The cabinet may reopen the PAL permit, during the PAL effective period, to:

1. Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date;

2. Reduce the PAL consistent with any other requirement:

a. Enforceable as a practical matter; and,

b. Imposed on the major stationary source under the SIP; and

3. Reduce the PAL if the cabinet determines that a reduction is necessary to avoid causing or contributing to:

a. A National Ambient Air Quality Standard (NAAQS) or PSD increment violation; or

b. An adverse impact on visibility or another air quality related value that has been identified for a federal Class I area by a federal land manager and for which information is available to the general public.

(d) All permit reopenings shall be carried out under the public participation requirements of subsection (4) of this section except for permit reopenings to correct

1 typographical or calculation of errors that do not increase the PAL level.

2 (8) Expiration of a PAL. A PAL that is not renewed shall expire at the end of  
3 the PAL effective period and the requirements of this subsection shall then apply.

4 (a) Each emissions unit, or each group of emissions units, that existed under  
5 the PAL shall comply with an allowable emissions limitations under a revised permit  
6 established as follows:

7 1. An owner or operator of a major stationary source using a PAL shall  
8 submit a proposed allowable emissions limitation for each emissions unit, or each  
9 group of emissions units, by distributing the PAL allowable emissions for the major  
10 stationary source among each of the emissions units that existed under the PAL.

11 a. This proposal shall be submitted to the cabinet at least six (6) months  
12 before the expiration of the PAL permit but not sooner than eighteen (18) months  
13 before permit expiration.

14 b. If the PAL has not yet been adjusted for an applicable requirement that  
15 became effective during the PAL effective period, as required under subsection (9)(e)  
16 of this section, distribution of allowable emissions shall be made as if the PAL has been  
17 adjusted.

18 2. The cabinet shall decide the date and procedure the owner or operator  
19 shall use to distribute the PAL allowable emissions.

20 3. The cabinet shall issue a revised permit incorporating allowable limits for  
21 each emissions unit, or each group of emissions units, as the cabinet determines is  
22 appropriate.

23 (b) Each emissions unit shall comply with the allowable emissions limitation



1 on a twelve (12) month rolling basis. The cabinet may approve the use of monitoring  
2 systems other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with  
3 the allowable emissions limitation.

4 (c) The source shall continue to comply with a source-wide, multi-unit  
5 emissions cap equivalent to the level of the PAL emissions limitation until the cabinet  
6 issues the revised permit incorporating allowable limits for each emissions unit or each  
7 group of emissions units.

8 (d) A major modification at the major stationary source shall be subject to  
9 major NSR requirements.

10 (e) The major stationary source owner or operator shall continue to comply  
11 with any state or federal applicable requirements eliminated by the PAL that applied  
12 during or before the PAL effective period, except for those emissions limitations  
13 established pursuant to Section 16(4) of this administrative regulation.

14 (9) Renewal of a PAL.

15 (a) Public participation requirements.

16 1. The cabinet shall follow the public participation procedures specified in  
17 subsection (4) of this section in approving a request to renew a PAL for a major  
18 stationary source.

19 2. The cabinet shall provide a written rationale for the proposed PAL level  
20 for public review and comment.

21 3. Any person may propose a PAL level for the source for consideration by  
22 the cabinet during the public review period.

23 (b) Application deadline.

1        1. A major stationary source owner or operator shall submit an application  
2 for renewal of a PAL at least six (6) months before the date of permit expiration but not  
3 earlier than eighteen (18) months before permit expiration.

4        2. The deadline for application submittal shall ensure that the permit shall  
5 not expire before the permit is renewed.

6        3. If a complete application for renewal is submitted within the timeframe  
7 specified in subparagraph 1 of this paragraph, the PAL shall continue to be effective  
8 until the revised permit with the renewed PAL is issued.

9        (c) Application requirements. The application to renew a PAL permit shall  
10 contain:

11        1. The information required in subsection (2) of this section;

12        2. A proposed PAL level;

13        3. The sum of the potential to emit of all emissions units under the PAL with  
14 supporting documentation; and

15        4. Any other information the owner or operator wishes the cabinet to  
16 consider in determining the appropriate level to renew the PAL.

17        (d) PAL adjustment.

18        1. A PAL shall not exceed the source's potential to emit. The cabinet shall  
19 adjust the PAL downward if a source's potential to emit has declined below the PAL  
20 level.

21        2. The cabinet may renew the PAL at the same level as the current PAL if  
22 the sum of the baseline actual emissions for all emissions units at the source plus an  
23 amount equal to the significant level is equal to or greater than eighty (80) percent of

1 the current PAL level, unless the sum is greater than the source's potential to emit.

2       3. If the sum of the baseline actual emissions for all emissions units at the  
3 source plus an amount equal to the significant level is less than eighty (80) percent of  
4 the current PAL level, the cabinet may set the PAL at a level that is determined to be:

5       a. More representative of the source's baseline actual emissions; or

6       b. Appropriate considering the following factors:

7       (i) Air quality needs;

8       (ii) Advances in control technology;

9       (iii) Anticipated economic growth in the area of the source;

10       (iv) The cabinet's goal of promoting voluntary emissions reductions;

11       (v) Cost effective emissions control alternatives; and

12       (vi) Other factors as specifically identified by the cabinet in its written  
13 rationale for setting the PAL level.

14       4. The cabinet shall not approve a renewed PAL level higher than the  
15 current PAL, unless the major stationary source has complied with the provisions of  
16 subsection (10) of this section.

17       (e) The PAL shall be adjusted at the time of PAL permit renewal or Title V  
18 permit renewal, whichever comes first, if:

19       1. The compliance date for a state or federal applicable requirement that  
20 applies to the PAL source occurs during the PAL effective period; and

21       2. The cabinet has not already adjusted for such requirement.

22       (10) Increasing a PAL during the PAL effective period. The cabinet may  
23 increase a PAL emissions limitation during the PAL effective period if the major

1 stationary source complies with the provisions of this subsection.

2 (a) Application procedures. The owner or operator of the major stationary  
3 source shall submit a complete application for a PAL increase that includes the  
4 following:

5 1. Identification of the emissions units contributing to the increase in  
6 emissions for the PAL major modification;

7 2. Demonstration that the increased PAL, as calculated in paragraph (c) of  
8 this subsection, does not exceeds the PAL.

9 a. The level of control that results from BACT equivalent controls on each  
10 significant or major emissions unit shall be determined by conducting a new BACT  
11 analysis at the time the application is submitted, unless the emissions unit is currently  
12 required to comply with a BACT or LAER requirement that was established within the  
13 preceding ten (10) years.

14 b. If an emissions unit currently complies with BACT or LAER, the assumed  
15 control level for that emissions unit shall be equal to the current level of BACT or LAER  
16 for that emissions unit; and

17 3. A statement that the increased PAL level shall be effective on the day any  
18 emissions unit that is part of the PAL major modification becomes operational and  
19 begins to emit the PAL pollutant.

20 (b) NSR permit and compliance requirement. The owner or operator shall  
21 obtain a major NSR permit for all emissions units contributing to the increase in  
22 emissions for the PAL major modification.

23 1. A significant level shall not apply in deciding for which emissions units a

1 major NSR permit shall be obtained; and

2       2. Emissions units that obtain a major NSR permit shall comply with any  
3 emissions requirements resulting from the major NSR process, even though the units  
4 shall also become subject to the PAL or shall continue to be subject to the PAL.

5       (c) Calculation of increased PAL. The cabinet shall calculate the new PAL  
6 as the sum of the allowable emissions for each modified or new emissions unit, plus the  
7 sum of the baseline actual emissions of the significant and major emissions units  
8 assuming application of BACT equivalent controls, plus the sum of the baseline actual  
9 emissions of the small emissions units.

10       (d) Public notice requirement. The public notice requirements of subsection  
11 (4) of this section shall be followed during PAL permit revision for an increased PAL  
12 level.

13       (11) Monitoring requirements for PALs.

14       (a) General requirements.

15       1. Each PAL permit shall contain enforceable requirements for the chosen  
16 monitoring system that accurately determines plantwide emissions of the PAL pollutant  
17 in terms of mass per unit of time;

18       2. A monitoring system authorized for use in the PAL permit shall be:

19       a. Approved by the cabinet; and

20       b. Based on sound science and meet generally acceptable scientific  
21 procedures for data quality and manipulation;

22       3. The data generated by a monitoring system shall meet minimum legal  
23 requirements for admissibility in a judicial proceeding to enforce the PAL permit;

1        4. The PAL monitoring system shall employ one or more of the four general  
2 monitoring approaches meeting the minimum requirements set forth in paragraph (b) of  
3 this subsection;

4        5. The cabinet may approve an alternative monitoring approach that meets  
5 the requirements of subparagraphs 1 to 3 of this paragraph; and

6        6. Failure to use a monitoring system that meets the requirements of this  
7 section shall render the PAL invalid.

8        (b) Minimum performance requirements for approved monitoring approaches.  
9 If conducted in accordance with the minimum requirements in paragraphs (c) to (i) of  
10 this subsection, the following shall be acceptable monitoring approaches:

11        1. Mass balance calculations for activities using coatings or solvents;

12        2. CEMS;

13        3. CPMS or PEMS; and

14        4. Emission factors.

15        (c) Mass balance calculations. An owner or operator using mass balance  
16 calculations to monitor PAL pollutant emissions from activities using coatings or  
17 solvents shall:

18        1. Provide a demonstrated means of validating the published content of the  
19 PAL pollutant that is contained in or created by all materials used in or at the emissions  
20 unit;

21        2. If the PAL pollutant cannot be accounted for in the process, assume that  
22 the emissions unit emits all of the PAL pollutant that is contained in or created by any  
23 raw material or fuel used in or at the emissions unit; and

1        3. If the vendor of the material or fuel from which the pollutant originates  
2 publishes a range, use the highest value of the published range of pollutant content to  
3 calculate the PAL pollutant emissions, unless the cabinet determines there is site-  
4 specific data or a site-specific monitoring program to support another pollutant content  
5 within the range.

6        (d) CEMS. An owner or operator using CEMS to monitor PAL pollutant  
7 emissions shall meet the following requirements:

8        1. CEMS shall comply with applicable performance specifications found in  
9 40 C.F.R. Part 60, Appendix B; and

10       2. CEMS shall sample, analyze, and record data at least every fifteen (15)  
11 minutes while the emissions unit is operating.

12       (e) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor  
13 PAL pollutant emissions shall meet the following requirements:

14       1. The CPMS or the PEMS shall be based on current site-specific data  
15 demonstrating a correlation between the monitored parameter and the PAL pollutant  
16 emissions across the range of operation of the emissions unit; and

17       2. While the unit is operating, each CPMS or PEMS shall sample, analyze,  
18 and record data at least every fifteen (15) minutes, or at another less frequent interval  
19 approved by the cabinet.

20       (f) Emission factors. An owner or operator using emission factors to monitor  
21 PAL pollutant emissions shall meet the following requirements:

22       1. All emission factors shall be adjusted, if appropriate, to account for the  
23 degree of uncertainty or limitations in the factors' development;

1           2. The emissions unit shall operate within the designated range of use for  
2 the emission factor, if applicable; and

3           3. If technically practicable, the owner or operator of a significant emissions  
4 unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct  
5 validation testing to determine a site-specific emission factor within six (6) months of  
6 PAL permit issuance, unless the cabinet determines that testing is not required.

7           (g) A source owner or operator shall record and report maximum potential  
8 emissions without considering enforceable emissions limitations or operational  
9 restrictions for an emissions unit during any period of time there is no monitoring data,  
10 unless another method for determining emissions during such periods is specified in  
11 the PAL permit.

12           (h) If an owner or operator of an emissions unit cannot demonstrate a  
13 correlation between the monitored parameters and the PAL pollutant emissions rate at  
14 all operating points of the emissions unit, as an alternative to the requirements of  
15 paragraphs (c) to (g) of this subsection, at the time of permit issuance the cabinet shall:

16           1. Establish default values for determining compliance with the PAL based  
17 on the highest potential emissions reasonably estimated at operating points; or

18           2. Determine that operation of the emissions unit during operating conditions  
19 when there is no correlation between monitored parameters and the PAL pollutant  
20 emissions is a violation of the PAL.

21           (i) Re-validation. All data used to establish the PAL pollutant shall be  
22 revalidated through performance testing or other scientifically valid means approved by  
23 the cabinet. Validation testing shall occur at least once every five (5) years after



1 issuance of the PAL.

2 (12) Recordkeeping requirements.

3 (a) The PAL permit shall require an owner or operator to retain a copy of all  
4 records necessary to determine compliance with any requirement of this section and of  
5 the PAL, including a determination of each emissions unit's twelve (12) month rolling  
6 total emissions for five (5) years from the date of the determination.

7 (b) The PAL permit shall require an owner or operator to retain a copy of the  
8 following records for the duration of the PAL effective period plus five (5) years:

9 1. A copy of the PAL permit application and any applications for revisions to  
10 the PAL; and

11 2. Each annual certification of compliance pursuant to Title V and the data  
12 used to certify compliance.

13 (13) Reporting and notification requirements. The owner or operator shall  
14 submit semi-annual monitoring reports and prompt deviation reports to the cabinet in  
15 accordance with 401 KAR Chapter 52 that meet the following requirements:

16 (a) Semi-annual report. The semi-annual report shall be submitted to the  
17 cabinet within thirty (30) days of the end of each reporting period and shall contain:

18 1. The identification of owner and operator and the permit number;

19 2. Total annual emissions, in tpy, based on a twelve (12) month rolling total  
20 for each month in the reporting period recorded pursuant to subsection (12)(a) of this  
21 section;

22 3. All data used in calculating the monthly and annual PAL pollutant  
23 emissions, including any quality assurance or quality control data;

1        4. A list of any emissions units modified or added to the major stationary  
2 source during the preceding six (6) month period;

3        5. The number, duration, and cause of any deviations or monitoring  
4 malfunctions, other than the time associated with zero and span calibration checks, and  
5 any corrective action following a deviation;

6        6. A notification of permanent or temporary shutdown of any monitoring  
7 system including:

8            a. The reason for the shutdown;

9            b. The anticipated date that the monitoring system shall be fully operational  
10 or shall be replaced with another monitoring system;

11           c. If applicable, a statement that the emissions unit monitored by the  
12 monitoring system continued to operate without the monitoring system; and

13           d. The calculation of the emissions of the pollutant or the number  
14 determined according to subsection (11)(h) of this section that is included in the permit;  
15 and

16        7. A signed statement by the responsible official, as defined by 401 KAR  
17 52:001, certifying the truth, accuracy, and completeness of the information provided in  
18 the semi-annual report.

19        (b) Deviation report. The major stationary source owner or operator shall  
20 submit reports of any deviation or exceedance of the PAL requirements, including  
21 periods monitoring is unavailable.

22           1. A report submitted pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B) shall satisfy the  
23 deviation reporting requirement;

1           2.    The deviation report shall be submitted within the time limits prescribed  
2 by 40 C.F.R. 70.6(a)(3)(iii)(B);

3           3.    The deviation report shall contain the following information:

4           a.    The identification of the owner, the operator and the permit number;

5           b.    The PAL requirement that experienced the deviation or that was  
6 exceeded;

7           c.    Emissions resulting from the deviation or the exceedance; and

8           d.    A signed statement by the responsible official, as defined by 401 KAR  
9 52:001, certifying the truth, accuracy, and completeness of the information provided in  
10 the report.

11          (c)    Re-validation results. The owner or operator shall submit to the cabinet  
12 the results of any re-validation test or method within three (3) months after completion  
13 of the test or method.

14          (14)   Transition requirements.

15          (a)    After the U.S. EPA approves the Kentucky SIP revisions for the PAL  
16 provisions published in 67 Fed. Reg. 80186, December 31, 2002, the cabinet shall only  
17 issue a PAL that complies with the requirements of this section.

18          (b)    The cabinet may supersede a PAL that was established before the date  
19 the U.S. EPA approves the Kentucky SIP revisions for the PAL provisions published in  
20 67 Fed. Reg. 80186, December 31, 2002, with a PAL that complies with the  
21 requirements of this section.

22          [Ambient Air Increments.]

[Pollutant	Maximum Allowable Increase (Micrograms per cubic meter)
Class-I	
Particulate Matter:	
PM <sub>10</sub> , annual arithmetic mean	4
PM <sub>10</sub> , 24-hour maximum	8
Sulfur Dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen Dioxide:	
Annual arithmetic mean	2.5
Class-II	
Particulate Matter:	
PM <sub>10</sub> , annual arithmetic mean	17
PM <sub>10</sub> , 24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
Nitrogen Dioxide:	
Annual arithmetic mean	25]

- 1            **Section 24. Incorporation by Reference.**    (1)    The following material is
- 2    incorporated by reference:

1        (a)1. Documents from the Code of Federal Regulations:

2        a. "40 C.F.R. Part 51, Appendix W to Part 51 - Guideline on Air Quality  
3 Models, as published in the Code of Federal Regulations, July 1, 2003."

4        b. "40 C.F.R. Part 58, Appendix B to Part 58 - Quality Assurance  
5 Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring, as  
6 published in the Code of Federal Regulations, July 1, 2003."

7        c. "40 C.F.R. Part 60, Appendix B to Part 60 - Performance Specifications,  
8 as published in the Code of Federal Regulations, July 1, 2003."

9        2. Copies of the Code of Federal Regulations and the Federal Register may  
10 be obtained from the Superintendent of Documents, U.S. Government Printing Office,  
11 Attn.: New Orders, P.O. Box 371954, Pittsburgh PA 15250-7954; Phone (202) 512-  
12 1800; FAX (202) 512-2250.

13        (2) The documents incorporated by reference in subsection (1) of this section  
14 are available for public inspection and copying (subject to copyright law) at the  
15 following main and regional offices of the Kentucky Division for Air Quality during the  
16 normal working hours of 8 a.m. to 4:30 p.m., local time:

17        (a) Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky  
18 40601-1403, (502) 573-3382;

19        (b) Ashland Regional Office, 1550 Wolohan Drive, Suite 1, Ashland,  
20 Kentucky, 41102, (606) 929-5285;

21        (c) Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green,  
22 Kentucky, 42104, (270) 746-7475;

23        (d) Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110,

- 1 Florence, Kentucky, 41042, (859) 525-4923;
- 2 (e) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky,
- 3 41701, (606) 435-6022;
- 4 (f) London Regional Office, 875 S. Main Street, London, Kentucky, 40741,
- 5 (606) 878-0157;
- 6 (g) Owensboro Regional Office, 3032 Alvey Park Drive, W., Suite 700,
- 7 Owensboro, Kentucky, 42303, (270) 687-7304;
- 8 (h) Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky,
- 9 42003, (270) 898-8468; and
- 10 (i) Frankfort Regional Office, 643 Teton Trail, Suite B, Frankfort, Kentucky
- 11 40601, (502) 564-3358. [Significant Air Quality Impact.]

[Pollutant	Air Quality Level	Averaging Time
Carbon monoxide	575 ug/m <sup>3</sup>	8-hour average
Nitrogen dioxide	14 ug/m <sup>3</sup>	annual average
Particulate matter	10 ug/m <sup>3</sup> of PM <sub>10</sub>	24-hour average
Sulfur dioxide	13 ug/m <sup>3</sup>	24-hour average
Ozone	No de minimis air quality level is provided for ozone. However, a net increase of 100 tons per year or more of volatile organic compounds subject to this administrative regulation is required to perform an ambient impact analysis including the gathering of ambient air quality data.	
Lead	0.1 ug/m <sup>3</sup>	3-month average
Mercury	0.25 ug/m <sup>3</sup>	24-hour average
Beryllium	0.001 ug/m <sup>3</sup>	24-hour average
Fluorides	0.25 ug/m <sup>3</sup>	24-hour average

Vinyl chloride	15 ug/m <sup>3</sup>	24-hour average
Hydrogen sulfide	0.2 ug/m <sup>3</sup>	1-hour average
Total reduced sulfur	10 ug/m <sup>3</sup>	1-hour average
Reduced sulfur compounds	10 ug/m <sup>3</sup>	1-hour average]

1 **[Section 25. Ambient Air Increments for Class I Variances.]**

	[Maximum Allowable Increase (micrograms per cubic meter)]
Particulate Matter:	
PM <sub>10</sub> , annual arithmetic mean	17
PM <sub>10</sub> , 24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325
Nitrogen Dioxide:	
Annual arithmetic mean	25]

2 **[Section 26. Ambient Air Increments for Presidential or Gubernatorial SO<sub>2</sub>**  
3 **Variances.]**

[Maximum Allowable Increase (Micrograms per cubic meter)]		
-	Terrain areas	
Period of Exposure	Low	High
24-hour maximum	36	62

3-hour maximum	130	221}
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1



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Date

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LaJuana S. Wilcher, Secretary  
Environmental and Public Protection Cabinet

**PUBLIC HEARING:** A public hearing on this administrative regulation shall be held on April 30, 2004, at 10:00 a.m. (Eastern Time) in the Conference Room of the Division for Air Quality at 803 Schenkel Lane, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by April 23, 2004, five (5) workdays prior to the hearing, of their intent to attend.

This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will be made. If you request a transcript, you will be required to pay for it.

If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted until April 30, 2004. Send written notification of intent to be heard at the hearing or written comments on the proposed administrative regulation to the contact person.

The hearing facility is accessible to persons with disabilities. Requests for reasonable accommodations, including auxiliary aids and services necessary to participate in the hearing, may be made to the contact person at least five (5) workdays prior to the hearing.

**CONTACT PERSON:** Millie Ellis, Environmental Technologist III, Regulation Development Section, Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601, telephone number (502) 573-3382, and facsimile number (502) 573-3787.

## **REGULATORY IMPACT ANALYSIS AND TEIRING STATEMENT**

**Administrative Regulation #:** 401 KAR 51:017

**Contact person:** Millie Ellis

**(1) Provide a brief summary of:**

**(a) What this administrative regulation does:**

The administrative regulation provides for the prevention of significant deterioration of ambient air quality (PSD). It applies to major stationary sources and major modifications constructing in areas that are designated as attainment or unclassified for the specified pollutants. To receive approval to construct, a source that is subject to this administrative regulation must show that it will not cause emissions to increase by set incremental amounts; that it will not cause or contribute to a violation of a National Ambient Air Quality Standard (NAAQS); and that it will use the best available control technology (BACT) to control its emissions.

**(b) The necessity of this administrative regulation:**

The administrative regulation contains a preconstruction review program for the construction and modification of any major stationary source of air pollution in an attainment or unclassified area, as mandated under 42 U.S.C. 7470 to 7479 (Part C to Subpart 1 of the Clean Air Act). The administrative regulation is necessary in order to assure that the NAAQS are achieved and maintained; to protect areas of clean air; to protect visibility and other Air Quality Related Values (AQRVs) in national parks and other natural areas of special concern; to assure that appropriate emissions controls are applied; to maximize opportunities for economic development consistent with the preservation of clean air resources; and to ensure that any decision to increase air pollution is made only after full public consideration of all the consequences of such a decision.

**(c) How this administrative regulation conforms to the content of the authorizing statutes:**

KRS 224.10-100 requires the cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. Once major new source review is triggered under this administrative regulation, the source must, among other things, install best available control technology and conduct modeling and monitoring as necessary.

KRS 224.10-100(26) mandates that the cabinet preserve existing clean air resources while ensuring economic growth by issuing regulations that are no more stringent than federal requirements to prevent significant deterioration in areas meeting the state air quality standards and NAAQS. The administrative regulation conforms to this mandate by being no more stringent than the corresponding federal mandate at 40 C.F.R. Part 51.166.

**(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes:**

The cabinet is required to promulgate administrative regulations for the prevention, abatement, and control of air pollution. The administrative regulation provides for the prevention of significant deterioration of ambient air quality as required under Part D to Title I of the Clean Air Act. Most of the proposed changes to the administrative regulation are being made in order to bring the state regulation into conformance with the corresponding federal regulatory revisions for the PSD program.

**(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:**

**(a) How the amendment will change this existing administrative regulation:**

The amendment will update the administrative regulation to include the amendments to the federal rule published at 67 Fed. Reg. 80186 (December 31, 2002) and at 68 Fed. Reg. 63021 (November 7, 2003). The federal revisions include changes in PSD applicability requirements for modifications to allow sources more flexibility to respond to rapidly changing markets and to plan for future investments in pollution control and prevention technologies. These revisions address baseline actual emissions, actual-to-projected actual applicability test, Clean Unit test, plantwide applicability limitations (PALs), and pollution control projects (PCP). In addition to updating the existing provisions to agree with the current federal PSD rule, the language of the proposed administrative regulation has also been revised to conform to KRS Chapter 13A drafting requirements.

**(b) The necessity of the amendment to this administrative regulation:**

The amendment to the administrative regulation is necessary in order to comply with KRS Chapter 224 and to afford Kentucky's businesses and industries the flexibility to modernize their operations and remain competitive with facilities in surrounding states.

**(c) How the amendment conforms to the content of the authorizing statutes:**

The amendments to the administrative regulation conform to KRS Chapter 224 as it is identical to the amendments to the federal regulation.

**(d) How the amendment will assist in the effective administration of statutes:**

In addition to updating the existing administrative regulation to agree with the current federal PSD rule, the proposed amendment is designed to streamline the PSD program and provide sources with regulatory certainty.

**(3) List the type and number of individuals, businesses, organizations, or state**

**and local governments affected by this administrative regulation.**

Approximately 49 entities are currently subject to the administrative regulation. Entities potentially affected by the proposed amendment to the administrative regulation include major new stationary sources that construct in areas designated attainment or unclassified, and those that have major modifications in the future. While affected sources will be in all industry groups, the majority of sources potentially affected by the amendment are expected to be in the following groups: electric utilities, petroleum refining, chemical processes, natural gas transport, pulp and paper mills, paper mills, automobile manufacturing, and pharmaceuticals.

**(4) Provide an assessment of how the above group or groups will be impacted by either the implementation of this administrative regulation, if new, or by the change if it is an amendment:**

The amendment includes changes in the PSD applicability requirements for modifications to allow sources more flexibility to respond to rapidly changing markets and to plan for future investments in pollution control and prevention technologies. The changes are intended to provide greater regulatory certainty, administrative flexibility, and permit streamlining, while ensuring the current level of environmental protection and benefit derived from the PSD program.

**(5) Provide an estimate of how much it will cost to implement this administrative regulation:**

**(a) Initially:**

The division will not incur any additional costs to implement the administrative regulation.

**(b) On a continuing basis:**

There will not be any continuing costs associated with the implementation of the administrative regulation.

**(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation:**

The division's operating budget will be used to implement and enforce the administrative regulation.

**(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment.**

No increase in fees or funding is necessary to implement the proposed amendment to the administrative regulation.

**(8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees.**

The administrative regulation does not establish any fees, nor does it directly or indirectly increase any fees.

**(9) TIERING: Is tiering applied? (Explain why tiering was or was not used.)**

Yes. The administrative applies to major stationary sources or major modifications, which are defined to be sources that have a potential to emit of 100 to 250 tons per year or more of a regulated NSR pollutant, and modifications that result in a significant net emissions increase.

## FEDERAL MANDATE ANALYSIS COMPARISON

**Administrative Regulation #:** 401 KAR 51:017

**Contact person:** Millie Ellis

- 1. Federal statute or regulation constituting the federal mandate.**  
The federal mandate is found at 50 C.F.R. 51.166 as amended at 67 Fed. Reg. 80186 (December 31, 2002).
- 2. State compliance standards.**  
The state compliance standards are found in KRS 224.10-100, 224.20-100, 224.20-110, and 224.20-120.
- 3. Minimum or uniform standards contained in the federal mandate.**  
The federal mandate requires any source described in Section 1 of the proposed administrative regulation to show that construction or modification of the source will not cause emissions to increase by set incremental amounts, and that the source's emissions will not cause or contribute to a violation of a NAAQS. The source must also show that best available control technology (BACT) will be used to control emissions.
- 4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate?**  
No. The amendments to the administrative regulation are identical to the amendments to the federal regulation and will impose no more stringent requirements than those required by the federal mandate.
- 5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements.**  
Stricter standards and requirements are not imposed.

## FISCAL NOTE ON LOCAL GOVERNMENT

**Administrative Regulation #:** 401 KAR 51:017

**Contact person:** Millie Ellis

**Phone Number:** (502) 573-3382

New ☐ Amendment ☒

1. **Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government?**

Yes ☒ No ☐

2. **State what unit, part or division of local government this administrative regulation will affect.**

This administrative regulation would affect any unit, part, or division of local government operating a unit that meets the applicability determination of Section 1 of the administrative regulation.

3. **State the aspect or service of local government to which this administrative regulation relates.**

The most likely aspects of service of local government that are potentially affected by the administrative regulation are electric utilities and natural gas transport.

4. **Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the administrative regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.**

**Revenues (+/-):** There is no known effect on current revenues.

**Expenditures (+/-):** Although it cannot be quantified, this administrative regulation is designed result in a reduction in costs to the regulated community.

**Other Explanation:** There is no further explanation.



**SUMMARY OF NEW MATERIAL INCORPORATED BY REFERENCE  
IN 401 KAR 51:017  
40 C.F.R. 60 Appendix B - Performance Specifications**

State Implementation Plans (SIPs) are required under 40 C.F.R. Chapter 51 to include legally enforceable provisions requiring certain categories of stationary sources to monitor their emissions on a continuous basis. 40 C.F.R. 60 Appendix B sets forth performance specifications that each emissions monitoring system must meet. Continuous emissions monitoring systems are one of several monitoring methods required to track emissions from stationary sources establishing a plantwide applicability limitation (PAL) under the amendments to this administrative regulation, and are therefore subject to the performance standards contained in 40 C.F.R. 60 Appendix B. Implementation of this administrative regulation will require no additional state funding. This material from the Code of Federal Regulations consists of 74 pages and contains the following:

- Performance Specification 1 -- Specifications and test procedures for continuous opacity monitoring systems in stationary sources
- Performance Specification 2 -- Specifications and Test Procedures for SO<sub>2</sub> and NO<sub>x</sub> Continuous Emission Monitoring Systems in Stationary Sources
- Performance Specification 3 -- Specifications and Test Procedures for O<sub>2</sub> and CO<sub>2</sub> Continuous Emission Monitoring Systems in Stationary Sources
- Performance Specification 4 -- Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources
- Performance Specification 4A -- Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources
- Performance Specification 4B -- Specifications and Test Procedures for Carbon Monoxide and Oxygen Continuous Monitoring Systems in Stationary Sources
- Performance Specification 5 -- Specifications and Test Procedures for TRS Continuous Emission Monitoring Systems in Stationary Sources
- Performance Specification 6 -- Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources
- Performance Specification 7 -- Specifications and Test Procedures for Hydrogen Sulfide Continuous Emission Monitoring Systems in Stationary Sources
- Performance Specification 8 -- Performance Specifications for Volatile Organic Compound Continuous Emission Monitoring Systems in Stationary Sources
- Performance Specification 8A -- Specifications and Test Procedures for Total Hydrocarbon Continuous Monitoring Systems in Stationary Sources
- Performance Specification 9 -- Specifications and Test Procedures for Gas Chromatographic Continuous Emission Monitoring Systems in Stationary Sources
- Performance Specification 15 -- Performance Specification for Extractive FTIR Continuous Emissions Monitor Systems in Stationary Sources

## **SUMMARY OF AMENDMENT OF MATERIAL PREVIOUSLY INCORPORATED BY REFERENCE IN 401 KAR 51:017**

### **40 C.F.R. 51 Appendix W - Guideline on Air Quality Models**

40 C.F.R. 51 Appendix W is the guideline used in air quality modeling for regulatory purposes, as required by the federal New Source Review (NSR) Program. Dispersion modeling is required by 40 C.F.R. 51.166 for the Air Quality Impacts Analysis, as well as the Ambient Air Quality Analysis and Visibility Impairment analysis of the Additional Impacts Analysis during Prevention of Significant Deterioration (PSD) determinations conducted for major new sources or major modifications constructing in attainment areas. Dispersion modeling may also be required in an Air Quality Impacts Analysis when qualifying for a pollution control project (PCP) exclusion under the amendment to this administrative regulation.

Implementation of this administrative regulation will require no additional state funding.

This material from the Code of Federal Regulations consists of 134 pages and includes the following:

- 1.0 Introduction
- 2.0 Overview of Model Use
  - 2.1 Suitability of Models
  - 2.2 Levels of Sophistication of Models
  - 2.3 Availability of Models
- 3.0 Recommended Air Quality Models
  - 3.1 Preferred Modeling Techniques
    - 3.1.1 Discussion
    - 3.1.2 Recommendations
  - 3.2 Use of Alternative Models
    - 3.2.1 Discussion
    - 3.2.2 Recommendations
  - 3.3 Availability of Supplementary Modeling Guidance
- 4.0 Traditional Stationary-Source Models
  - 4.1 Discussion
  - 4.2 Recommendations
    - 4.2.1 Screening Techniques
      - 4.2.1.1 Simple Terrain
      - 4.2.1.2 Complex Terrain
    - 4.2.2 Refined Analytical Techniques
- 5.0 Model Use in Complex Terrain
  - 5.1 Discussion
  - 5.2 Recommendations
    - 5.2.1 Screening Techniques

- 5.2.2 Refined Analytical Techniques
- 6.0 Models for Ozone, Particulate Matter, Carbon Monoxide, Nitrogen Dioxide, and Lead
  - 6.1 Discussion
  - 6.2 Recommendations
    - 6.2.1 Models for Ozone
    - 6.2.1 Models for Particulate Matter
      - 6.2.2.1 PM-2.5
      - 6.2.2.2 PM-10
    - 6.2.3 Models for Carbon Monoxide
    - 6.2.4 Models for Nitrogen Dioxide (Annual Average)
    - 6.2.5 Models for Lead
- 7.0 Other Model Requirements
  - 7.1 Discussion
  - 7.2 Recommendations
    - 7.2.1 Visibility
    - 7.2.2 Good Engineering Practice Stack Height
    - 7.2.3 Long Range Transport (i.e., beyond 50km)
    - 7.2.4 Modeling Guidance for Other Governmental Programs
- 8.0 General Modeling Considerations
  - 8.1 Discussion
  - 8.2 Recommendations
    - 8.2.1 Design Concentrations
    - 8.2.2 Critical Receptor Sites
    - 8.2.3 Dispersion Coefficients
    - 8.2.4 Stability Categories
    - 8.2.5 Plume Rise
    - 8.2.6 Chemical Transformation
    - 8.2.7 Gravitational Settling and Deposition
    - 8.2.8 Complex Winds
    - 8.2.9 Calibration of Models
- 9.0 Model Input Data
  - 9.1 Source Data
    - 9.1.1 Discussion
    - 9.1.2 Recommendations
  - 9.2 Background Concentrations
    - 9.2.1 Discussion
    - 9.2.2 Recommendations (Isolated Single Source)
    - 9.2.3 Recommendations (Multi-Source Areas)
  - 9.3 Meteorological Input Data
    - 9.3.1 Length of Record of Meteorological Data
    - 9.3.2 National Weather Service Data
    - 9.3.3 Site Specific Data
    - 9.3.4 Treatment of Calms
- 10.0 Accuracy and Uncertainty of Models

- 10.1 Discussion
  - 10.1.1 Overview of Model Uncertainty
  - 10.1.2 Studies of Model Accuracy
  - 10.1.3 Use of Uncertainty in Decision-Making
  - 10.1.4 Evaluation of Models
- 10.2 Recommendations
- 11.0 Regulatory Application of Models
  - 11.1 Discussion
  - 11.2 Recommendations
    - 11.2.1 Analysis Requirements
    - 11.2.2 Use of Measured Data in Lieu of Model Estimates
    - 11.2.3 Emission Limits
- 12.0 Bibliography
- 13.0 References
- Appendix A to Appendix W of 40 CFR Part 51 -- Summaries of Preferred Air Quality Models